

Imperial College  
London

# POSTGRADUATE

SCIENCE

ENGINEERING

MEDICINE

BUSINESS

## PROSPECTUS 2017–18



1st

in the UK for graduate prospects

*The Guardian University Guide 2017*

50

scholarships available for the most talented PhD students from around the world, covering tuition fees and a living cost stipend for up to 3.5 years

8th

best university in the world

*Times Higher Education World University Rankings 2015–16*

No. 1

Most innovative university in Europe

*Reuters Top 100 Innovative Universities 2015*

No. 1

for research impact – Imperial has the greatest concentration of high-impact research of any major UK university

*Research Excellence Framework 2014*

141

countries represented in our international student community

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# WELCOME TO IMPERIAL



Imperial College London is the only university in the UK to focus exclusively on science, engineering, medicine and business. As a postgraduate student you will be contributing to an international community, whose research has a profound impact on society and the economy. The quality of our research environment was recognised in the Research Excellence Framework 2014, which rated Imperial as having the greatest concentration of high-impact research of any major UK university.

Whether you're joining us for a career-boosting Master's course or you're embarking on a research programme to make a brand new contribution in your field, we'll actively encourage you to make connections and draw inspiration from a community whose influence extends around the globe. What makes Imperial special is the quality of our people, who come here from all around the world, and our commitment to working across subject boundaries. And it starts right here.

# World renowned staff

The quality of our staff is one thing that sets the Imperial experience apart.

In total, 14 Nobel Prize winners and two Fields Medallists are associated with the College.

Our long list of prestigious Fellowships (see right) is testament to the outstanding contributions that our staff have made in their fields.

Our commitment to maintaining the highest standards is reinforced by our own annual Excellence in Teaching awards, recognising outstanding contributions in teaching, pastoral care, research supervision and support of the student experience.

Here are just a few of the leading staff who are contributing to our world class reputation:



**73**  
*Fellows of the Royal Society*

**84**  
*Fellows of the Royal Academy of Engineering*

**78**  
*Fellows of the Academy of Medical Sciences*



- 1 Professor Lord Ara Darzi is former Parliamentary Under-Secretary of State at the Department of Health (2007–09) and former UK Global Ambassador for Health and Life Sciences (2009–13). He is currently the Director of Imperial's Institute of Global Health Innovation.
- 2 Professor Sir John Pendry's work on metamaterials underpinned the development of the first invisibility cloak.
- 3 Professor Tommaso Valletti from the Business School has been appointed Chief Economist of the Directorate General for Competition by the European Commission.
- 4 Professor Molly Stevens received the 2016 Clemson Award for Basic Research from the Society for Biomaterials.
- 5 Professor Maggie Dallman was awarded an OBE for her contributions to bioscience.
- 6 Professor Xiaodong Zhang was elected to membership of the European Molecular Biology Organisation in 2016, in recognition of her outstanding achievements and contribution to scientific excellence.
- 7 Professor Sanjeev Gupta is a scientist and long-term Science Planner on NASA's Mars Science Laboratory Curiosity rover mission currently exploring Gale Crater.

## RANKINGS

### UK OVERALL RANKINGS

**3rd** *The Times and The Sunday Times Good University Guide 2016*

**4th** *The Complete University Guide 2017*

**7th** *The Guardian University Guide 2017*

### GLOBAL RANKINGS

**QS World University Rankings, 2015–16**

**4th** in Europe  
**8th** in world

**Times Higher Education World University Rankings, 2015–16**

#### OVERALL

**3rd** in Europe  
**8th** in world

#### ENGINEERING AND TECHNOLOGY

**4th** in Europe  
**9th** in world

#### LIFE SCIENCES

**3rd** in Europe  
**6th** in world

#### PHYSICAL SCIENCES

**5th** in Europe  
**16th** in world

#### CLINICAL, PRE-CLINICAL AND HEALTH

**4th** in Europe  
**5th** in world (joint)

**Academic Ranking of World Universities (ARWU), 2015**

**4th** in UK  
**23rd** in world

# World leading research

Imperial is home to many world leading pioneers in science, engineering and medicine and the alma mater to generations of award winners, government advisors, business leaders, politicians and entrepreneurs, who have found inspiration within our dynamic community.



It's a place where exciting things happen, where new ground is broken and where discoveries are regularly translated into practice to make the modern world a healthier, safer and cleaner place to live.

It's this focus on the practical application of our research and the high level of collaboration between our departments, centres and institutes that makes Imperial's research so effective. Our government-funded PhD training centres (pages 62–63) and six Global Challenge Institutes (pages 58–61) are the most obvious examples of this interdisciplinarity in practice, but our ethos of working across subject boundaries is an integral part of life across the College.

As a student here, you'll have the chance to interact with and take inspiration from staff who are world leaders in their subject fields.

You'll also be able to draw support, ideas and encouragement from peers across our postgraduate community. This includes staff and students from universities around the world through opportunities like our global PhD summer schools (page 15).

For examples of our research in action, see pages 8–13.

## REF 2014: working at the cutting edge

The quality of a university's research is a key consideration for most prospective postgraduate students in their search for a cutting edge institution that will propel their knowledge to the next level. The Research Excellence Framework (REF) provides a useful comparison of the quality of research across all UK higher education institutions. The assessment takes place every six or seven years – the previous one was in 2008 (when it was known as the Research Assessment Exercise).

In the REF 2014, 91 per cent of our research was classed as 'world leading' or 'internationally excellent' – the highest proportion of any major UK university (46.4 per cent achieved the highest possible 4\* score and 44.2 per cent achieved 3\*).

### WHY OUR REF 2014 RESULTS MATTER

► **154**  
UK universities took part in the REF

► **190,000**  
research outputs were reviewed by a special panel

► **52,000**  
academics submitted research to the REF

► **92%**  
of Imperial's eligible staff took part

To determine our score, expert panels judged submissions of research published between 2008 and 2013 by each eligible member of academic staff. They looked at three factors:

- Quality of research output (assessed by peer review)
- Vibrancy of the research environment (which considered research strategy, infrastructure, income and degrees awarded)
- Impact that the research has had outside of academia – included as an integral factor in the overall score for the first time

The scores for each factor were expressed as the proportion of the submission that met pre-defined quality thresholds – from the highest 4\* down to 1\*. These factors were combined to give an overall score for the subject areas – but with different weightings for each factor.

► FIND OUT MORE ABOUT IMPERIAL'S REF RESULTS:  
[WWW.IMPERIAL.AC.UK/REF](http://WWW.IMPERIAL.AC.UK/REF)

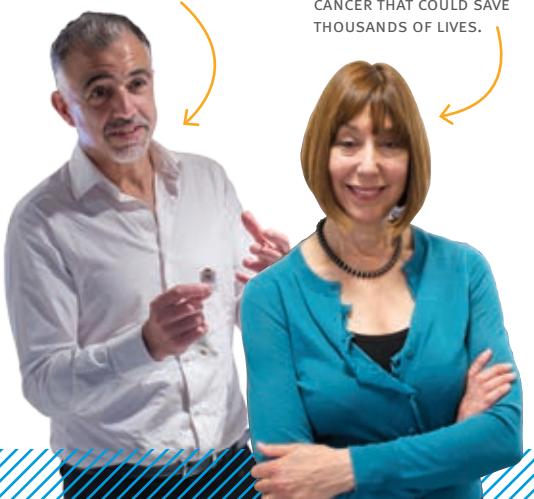
REGIUS PROFESSOR CHRISTOFER TOUMAZOU WAS NAMED EUROPE'S TOP INVENTOR IN 2014 FOR HIS DNA CHIP TO IMPROVE HEALTH MONITORING.

No. 1

### FOR RESEARCH IMPACT

Imperial has the greatest concentration of high-impact research of any major university

PROFESSOR WENDY ATKIN'S RESEARCH HAS LED TO THE INTRODUCTION OF A NEW WAY OF TESTING FOR BOWEL CANCER THAT COULD SAVE THOUSANDS OF LIVES.





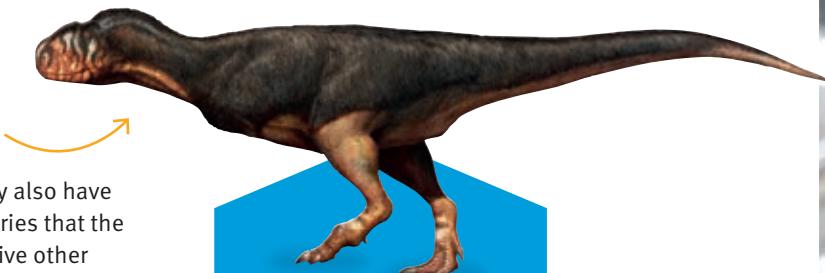
## Bone of contention

An unidentified fossil in a museum drawer has revealed the size of a ferocious dinosaur and may have solved a hundred-year-old puzzle.

PhD student Alessandro Chiarenza stumbled across the fossilised femur bone in a museum in Palermo, Italy. It belonged to a dinosaur known as an abelisaur, which may have been nine metres long, weighing up to two tonnes, making it potentially one of the largest of its kind ever found.

ABELISAURS HAD EXTREMELY SMALL FORELIMBS AND SCIENTISTS SUSPECT THEY WERE ALSO COVERED IN FLUFFY FEATHERS

Alessandro may also have debunked theories that the abelisaur and five other predators co-existed in what is now Morocco, putting this idea down to changing geology mixing up fossil deposits.



The fossil originally came from a sedimentary outcrop in Morocco called the Kem Kem Beds



## Glass act



Professor Julian Jones has developed a glass-like material that mimics cartilage and potentially encourages it to re-grow. The bio-glass material, consisting of silica and a plastic, mimics the shock-absorbing and load-bearing qualities of real cartilage. One formulation has the potential to encourage cartilage cells to grow in knees, previously not possible with conventional methods. Another substitute could replace damaged intervertebral discs in the spine, mimicking the qualities of real cartilage.

## Helping hands

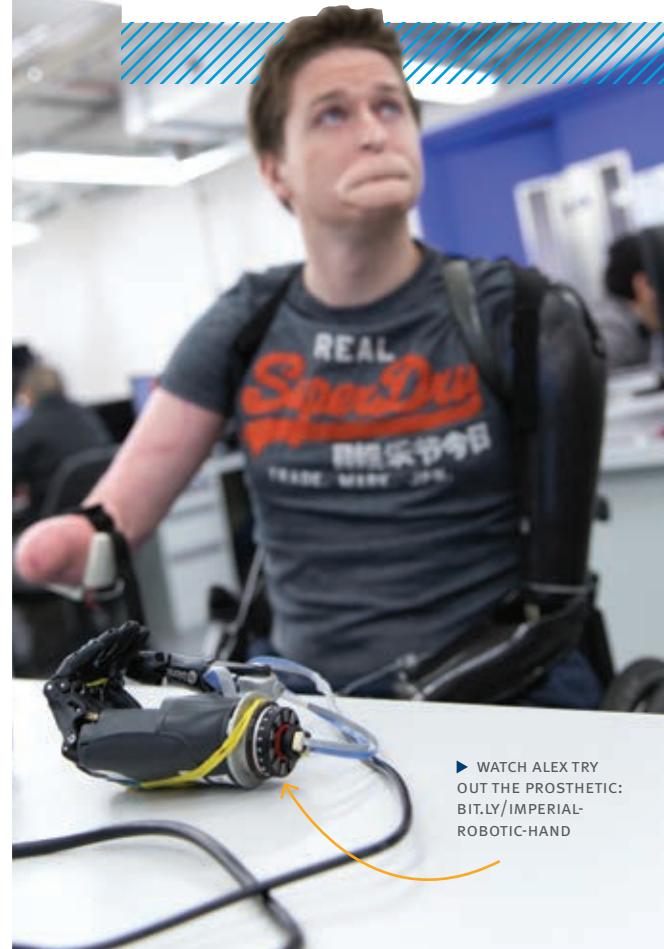
Scientists have developed sensor technology that enables a user to control a robotic hand via arm movements and muscle vibrations.

The sensor detects signals from tiny vibrations produced by muscle fibres when they flex. The vibrations are detected by the sensor and passed on to the robotic hand, which interprets them as commands. The team led by Dr Ravi Vaidyanathan believes the sensor could also control other technologies.



**“** Current prosthetics can be very cumbersome, so any technology that can reduce the burden on users is an important step forward.”

Alex Lewis – who contracted a rare infection that led to tissue damage, including the loss of both legs and his right arm – tests the prosthetic hand (below).



► WATCH ALEX TRY OUT THE PROSTHETIC: [BIT.LY/IMPERIAL-ROBOTIC-HAND](http://bit.ly/imperial-robotic-hand)



### PATCHY SIGNAL

Lower-income neighbourhoods have worse mobile phone coverage than wealthier areas, according to research from Imperial College Business School.

# 15%

less network coverage in lower-income regions compared to more affluent areas in the United States

The study found that lower-income regions in the United States receive almost 15 per cent less network coverage compared to more affluent areas. The research showed a clear divide in mobile phone coverage between people living in wealthier areas, compared to those living in lower-income neighbourhoods.

The researchers used crowdsourced information to determine mobile coverage across six states. They also mapped the location and density of base stations and found fewer in poorer areas.

## Not-so-super squirrels

Grey squirrels are often maligned for causing the decline of red squirrels, but it turns out they are not that good at invading new places after all.

Genetic profiling by Lisa Signorile from the Department of Life Sciences showed that greys were introduced in small groups, and instead of interbreeding to make a ‘supersquirrel’, these groups stayed distinct and didn’t spread far. Instead, human actions contributed far more to the epidemic of greys.



GENETICS PROVED THAT ONE SQUIRREL FOUND ON THE ISLE OF SKYE HAD STOWED AWAY UNDER A CAR BONNET ALL THE WAY FROM GLASGOW.

## Cows chow down on edible plastic



Fields bordering roads in the countryside are often lined with rows of hay bales wrapped in plastic. Usually, all that plastic goes to landfill, but Imperial PhD students have come up with a novel way to tackle the issue.

The student team created BioNet – an edible plastic wrapping that livestock can simply chew off before they get to the hay, straw or silage inside – preventing hours of unwrapping as well as unnecessary waste.

## HUGE GLACIER APPROACHING MELTDOWN

East Antarctica is the world’s largest area of ice. Long thought to be relatively stable in the face of global warming, researchers from the Grantham Institute have discovered that one major glacier could soon start melting a lot faster than was previously expected. When looking at the geology underlying Totten Glacier, the team found evidence of accelerated melting events in the glacier’s history.



They predict that the glacier could be in this position again within the next 100 years, causing rapid melting. Full melting may take several hundred years, but once the glacier crosses the threshold into the unstable region, the melting will be unstoppable.

### ► 2.9 METRES

The total amount of sea-level rise that could be caused if 300km of the Totten Glacier melted.

## Data visualisation

An observatory for big data, enabling people to visualise everything from global cryptocurrency transactions, to migration patterns, to commuter movements on the Shanghai metro, has been launched at the Data Science Institute.

**“**This project marks a big step forward in uniting the worlds of business and data science and I anticipate that this observatory will play a vital role in helping businesses make sense of their data.”

Dr Mark Kennedy, Director of the KPMG Centre for Advanced Business Analytics at Imperial College Business School



## CLEANING UP THE OCEANS

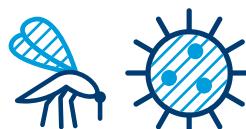
Plastic in the oceans is a problem for wildlife, and how best to clean it up is a hot topic. Imperial researchers looked at where plastics enter the oceans and used a model of currents to work out where best to place floating trash collectors.

They found that collectors on the coasts would capture nearly twice as much plastic as those placed exclusively in the ‘Great Pacific garbage patch’ – an area of the Pacific Ocean where lots of plastic is trapped by swirling currents.



## Using genetics to tackle malaria

Malaria is still a major killer, and one team of Imperial researchers is taking a radical approach to tackling the disease.

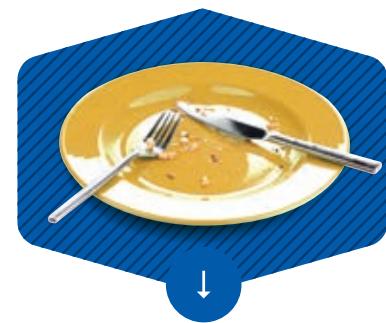


**90%**  
of malaria deaths occur in Sub-Saharan Africa

**200 MILLION+**  
malaria infections each year

They are targeting the species of mosquito that carries malaria by genetically modifying them. They have disrupted a gene, making females infertile, and used another clever genetic trick called 'gene drive' to make sure the trait is passed on to nearly every offspring, thereby spreading it through the population.

The hope is that local populations of mosquitoes will collapse until there are no longer enough to transmit the disease. The technology is still many years away from being trialled in the field, but laboratory tests have shown it to be highly effective.



### GUT HORMONES COULD HELP YOU LOSE WEIGHT

Imperial scientists are investigating whether infusions of hormones naturally produced by the gut could help reduce cravings for high calorie foods such as cake, chips and pizza. In the research, the team give volunteers compounds that mimic the action of natural hormones, produced by our stomachs, which make us feel full. The scientists then ask the participants to enter a brain scanner and show them pictures of foods such as cakes and donuts. The team monitor brain activity in the areas associated with food cravings, to see if these are reduced by the gut hormones.

## Last gasp chance



2%

Pollution's deadly effect is being investigated by a team at Imperial's School of Public Health.

Their research revealed that exposure to air pollution 30 years ago may still affect an individual's mortality risk today. The team studied 368,000 people over 38 years, and showed air

INCREASED RISK OF MORTALITY IN 2002–2009, FOR EVERY ADDITIONAL UNIT OF POLLUTION THAT PEOPLE WERE EXPOSED TO IN 1971

## The brain on LSD revealed

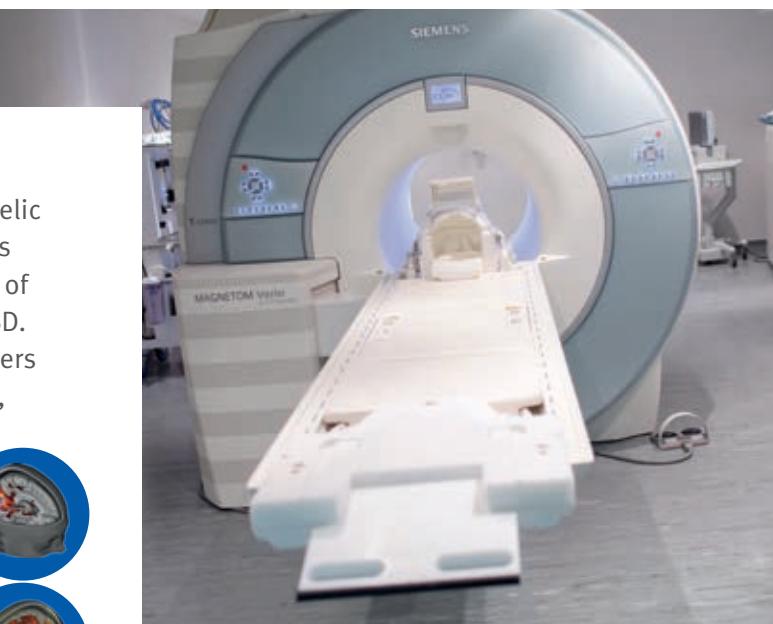
A team of Imperial scientists is investigating the effect of psychedelic drugs on the brain. The researchers have produced the first ever scans of the brain under the influence of LSD. In the study the team gave volunteers LSD in a specialist research centre, then used various scanning techniques to visualise how LSD alters the way the brain works.



AREAS ASSOCIATED WITH VISION MORE ACTIVE UNDER LSD (BOTTOM)

The results suggested the drug causes many brain areas to work together, creating an altered state of consciousness.

The research team are now investigating whether the compound could have therapeutic potential as a treatment for depression.



“ For the first time we can see what's happening in the brain during the psychedelic state. This could have great implications for psychiatry, and helping patients overcome conditions such as depression.”

Professor David Nutt, Department of Medicine

pollution was associated with an increased risk of death from conditions such as lung and heart disease. The team believe this may be due to particles of pollution entering the lungs and blood stream. Although pollution levels have decreased rapidly over the last 40 years, the research team recommend we should continue efforts to improve air quality.

# Professional skills development

Studying at Imperial is a challenging experience – and that's what makes it one of the best. You will work alongside experts in your subject field; you will also receive comprehensive training to develop your study and research skills and prepare you for your future career.

## THE GRADUATE SCHOOL

All postgraduate students enjoy automatic membership of the Graduate School. It offers separate professional development programmes for Master's and research students, tailored to match their specific needs.

Professional skills training forms an integral part of an Imperial postgraduate degree. It is designed to help you acquire the sort of study and broader professional skills to successfully achieve your qualification and to prepare you for life beyond Imperial, whether inside or outside academia.

The Graduate School also runs a year-round programme of events to bring students together across the College. These events range from a research symposium to a three-minute thesis competition, and aim to encourage interactions across subject boundaries and foster the sort of interdisciplinary working that Imperial thrives on.

### PROFESSIONAL SKILLS TRAINING

Developing graduates with a broad portfolio of skills is the aim of the Graduate School's professional development programmes for Master's and research students. Integrating feedback from students, course organisers and graduate employers, each programme covers a wide range of study and professional skills such as interview preparation, note taking, writing a literature review, networking, presenting skills and project management through courses that vary in length and delivery.

Find out more:  
[www.imperial.ac.uk/  
graduate-school](http://www.imperial.ac.uk/graduate-school)

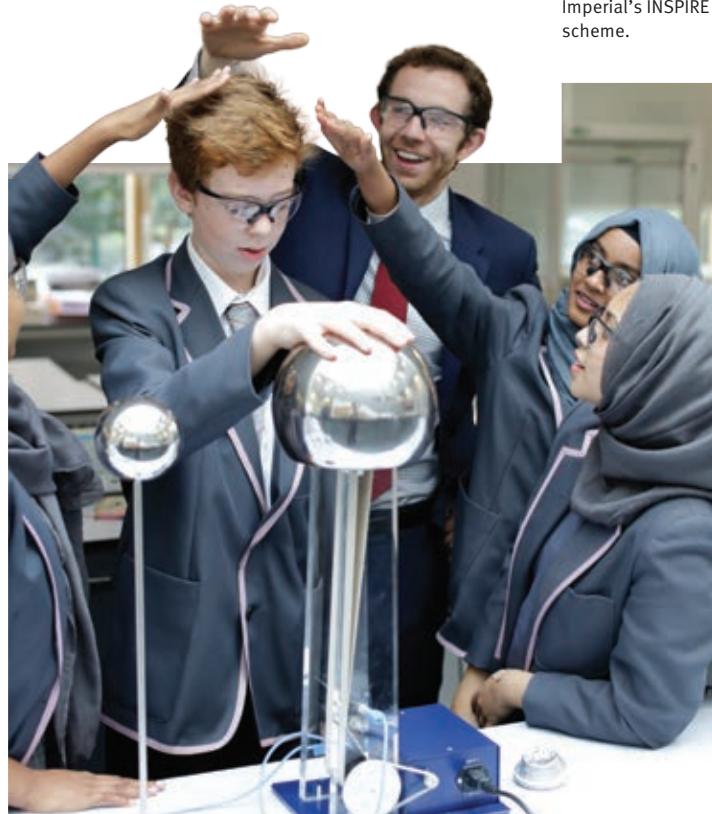


### TEACHING OPPORTUNITIES

Physics, chemistry, mathematics or engineering postgraduates who want to enter a teaching career can apply to join the INSPIRE full-time Postgraduate Certificate in Education (PGCE). Delivered with Canterbury Christ Church University, this ten-month teacher training programme combines teaching in partner schools in London with a series of outreach activities to bring science to life.

PhD students who are considering an academic career but don't want the commitment of a PGCE may have the chance to join our graduate teaching assistant training programme (STAR) to gain a nationally recognised teaching qualification (see page 57). Other teaching opportunities may also exist within your department, with training available to make sure you get the most out of your role.

Damian Phelan  
is a graduate of  
Imperial's INSPIRE  
scheme.



### VOLUNTEERING AND MENTORING

We recognise the valuable role our postgraduates play in inspiring the next generation of scientists. That's why we run and collaborate in a number of flexible volunteering and mentoring schemes that you can take part in alongside your studies, from peer-tutoring to one-off talks in local schools.

In addition, Imperial College Union co-ordinates a huge range of projects. Many activities can be accredited through our Imperial Plus scheme as a way of formally recognising the skills and experience you've gained.

Find out more:  
[www.imperial.ac.uk/schools](http://www.imperial.ac.uk/schools)

### GLOBAL PhD SUMMER SCHOOLS

Our international summer schools offer PhD students the valuable opportunity to develop their personal and research effectiveness alongside colleagues from some of the world's leading research universities, in addition to undertaking a research placement at one of our partner universities overseas.

### EXTRACURRICULAR CLASSES

Currently, evening classes in Arabic, French, German, Italian, Japanese, Korean, Mandarin Chinese, Portuguese, Russian and Spanish at various levels, as well as a wide variety of humanities topics, are available in our Centre for Languages, Culture and Communication. Piano, violin and singing lessons are available in the Blyth Music Centre, as well as 10 music practice rooms, bookable free of charge. Please note a charge applies for classes and lessons.

# Careers support and advice

A postgraduate degree from Imperial will provide you with an excellent foundation for your future – and the Careers Service is here to help you prepare for it.

## PROFESSIONAL CAREERS GUIDANCE

All students from the Faculties of Engineering, Natural Sciences and Medicine have access to a wide range of support from our Careers Service, ranging from one-to-one sessions with a professional careers consultant to daily skills seminars that are tailored to meet the different stages of the recruitment cycle. And don't worry if your career plans change after you graduate – you can continue to use our full range of services for up to three years. Business School students and alumni have access to their own Careers and Professional Development Service, with tailored resources and skills sessions.

**£33,354**

*Average starting salary of graduates with an Imperial postgraduate Master's degree*

**£34,135**

*Average starting salary of graduates with an Imperial postgraduate research degree*

DLHE survey, 2015



## CAREERS RESOURCES

The Careers Information Room is an excellent starting point for researching your options, with a team of staff on hand to help you. The Careers Service website also has an extensive collection of resources, including psychometric practice tests, downloadable careers talks, online careers libraries and useful tips and videos covering every aspect of the recruitment process.

Find out more:  
[www.imperial.ac.uk/  
careers](http://www.imperial.ac.uk/careers)



## CAREER DEVELOPMENT FOR PhD STUDENTS

PhD students have access to a tailored programme of career development activities. This includes a series of workshops and skills seminars, PhD and career sector forums, a dedicated careers fair, employer-led workshops and business activities to develop your commercial awareness.

## ACCESS TO EMPLOYERS

The quality of our graduates and our central London location make Imperial one of the most targeted UK universities by graduate employers.

We organise a year-round programme of employer events and activities to capitalise on our location, including drop-in recruiter-in-residence sessions, company presentations, careers lectures and weekly skills workshops, industry sector forums, mock interview sessions and seven annual careers fairs. These activities are a chance for you to learn more about different professions, hone your skills for interviews and assessment centres and meet leading recruiters face to face.

## JOBs, INTERNSHIPS AND PLACEMENTS

We publish around 4,000 vacancies a year for full- and part-time jobs, placements and internships through our online vacancy service, JobsLive.

If you need help finding an internship then you can contact our Placement and Internship advisors for guidance. Our Charity Insights initiative gives PhD students the chance to apply for a bursary to complete a four-week internship with a charity or statutory body.



The Careers Service organises a range of employer events throughout the year, giving you access to hundreds of potential employers on campus.

# Enterprising students

If you're considering a future as an entrepreneur starting up a new business, or you're a budding innovator aiming to join an existing one, you'll have every opportunity to develop the knowledge, skills and experience you need to put your ideas into action.



## SUCCESS STORIES



A team of Imperial alumni have created Órama, a socially responsible jewellery brand that works in partnership with Opportunity International to help women in disadvantaged communities develop their own businesses.



Imperial student Gabriella Santosa won £10,000 of funding in the Althea-Imperial programme for her start-up's innovative use of new membrane technology to remove and recycle hazardous micropollutants from wastewater.



### GREAT MINDS DON'T THINK ALIKE

The first port of call for students with an innovative idea is our Enterprise Lab. The team will be able to connect you to any advice, support, facilities and training you need from across Imperial. You will find lots of support to help you make your idea a reality, including access to facilities and training to help you turn your concept into a prototype.

- ▶ Imperial College Advanced Hackspace enables you to turn your ideas into physical prototypes, with free access to a network of facilities across our campuses, as well as regular hackathons and workshops.
- ▶ The Althea-Imperial programme is designed to encourage female students with an enterprising idea through a series of exclusive development and mentoring opportunities.
- ▶ Climate-KIC's Greenhouse is a special pre-incubation programme for students with a climate innovation idea, providing a flexible environment to assess its market potential and develop a business model.
- ▶ Imperial Create Lab helps students to learn real innovation skills, test ideas, and build a viable business plan. It also holds a weekly Ideas Surgery for quick feedback and assistance.

Gravity Sketch is a new app, launched by a team of Imperial alumni, that aims to simplify the process of 3D design and printing.

### SKILLS WORKSHOPS

The Graduate School delivers a wide range of free enterprise skills courses and workshops for PhD students, covering topics such as idea generation, business models, marketing your research and social enterprise.

### COMPETITIONS

We run a series of competitions where students can win up to £10,000 of prize money to help fund their ideas, including Dragon's Den style competitions and the Venture Catalyst Challenge.

### ENTERPRISING SOCIETIES

Our active student entrepreneurs run a number of enterprising societies, including:

- ▶ Imperial Entrepreneurs, the launchpad for the next generation of technology entrepreneurs at the College;
- ▶ the Imperial App Society, which inspires students to transform their environment by developing apps;
- ▶ E.quinox, a humanitarian organisation working to bring cost-effective and renewable energy to developing countries; and
- ▶ Enactus, a society committed to using the power of entrepreneurial action to improve the lives of people in need.

Find out more:  
[www.imperial.ac.uk/  
enterprisingstudents](http://www.imperial.ac.uk/enterprisingstudents)



Imperial team Motion Metrics has created a device to help skiers track their performance. After securing an investor at our Venture Catalyst Challenge, the team won the £15,000 first prize in the Santander Universities Entrepreneurship Awards.

Imperial student team AEROPOWDER won the £20,000 prize in the 2016 Mayor of London's Low Carbon Entrepreneur competition. Their creation uses feather waste to make low carbon home insulation.



# Celebrate joining a global alumni network

Your relationship with the College does not end when you graduate. As an Imperial alumnus, you will join a community of 190,000 former students in 200 countries.

It's a community that includes prestigious prize winners, inventors, business leaders, scientists, engineers, doctors, journalists, researchers and entrepreneurs – united in their shared experience of studying at one of the best universities in the world. Imperial provides lots of support to keep that sense of community alive, from invitations to events to an alumni email address that makes it easy to stay in touch wherever you may be in the world.

Find out more:  
[www.imperial.ac.uk/alumni](http://www.imperial.ac.uk/alumni)

## COME BACK AND VISIT US IN SOUTH KENSINGTON



1

- 1 The Alumni Visitor Centre on our South Kensington Campus provides an exclusive space for visiting alumni to relax, meet friends and colleagues and catch up with the latest College news.
- 2 A networking event for Mathematics alumni.
- 3 Students, staff and alumni who have been involved in Imperial's racing teams through the years reunited at a special event in 2014.



2



3



4

We have a global network of more than 50 alumni groups and associations where you can make professional connections.

- 4 Alumni and friends gather at a reception in Palo Alto.
- 5 Alumni visit CERN in Switzerland.
- 6 Alumni reunite at a reception hosted by President Gast in Kuala Lumpur.
- 7 Alumni explore dark matter with leading Imperial scientists.
- 8 Imperial academics discuss sustainability with alumni in Paris.



6



7

8

## A LIFETIME OF REWARDS

If you attend Imperial, you become part of a lifelong community, with access to a range of exclusive perks and events. These include the annual Alumni Weekend at our South Kensington Campus, full access to the Careers Service for up to three years after you graduate, and discounts on further study at the College and at Imperial College Business School.



Record numbers attended the Alumni Weekend at the Imperial Festival 2016. Left: Alumni entrepreneurs share their stories at a showcase during the Alumni Weekend 2016.



# THE HEART OF COLLEGE LIFE

The soaring presence of the Queen's Tower at our South Kensington Campus is a reminder of the College's history and heritage.

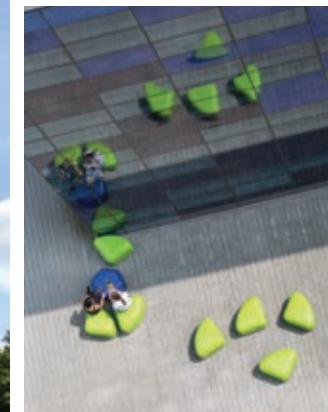
For our students, it plays a much more everyday role as a place to meet, to catch up with friends and to soak up the sun on the steps, flanked by the two stone lions that stand guard at its base.

87m

*Height of the Queen's Tower – formerly part of the Imperial Institute, which was built to mark Queen Victoria's Golden Jubilee in 1887*

# Study environment

We were ranked top or joint-top for providing an environment conducive to producing ‘world leading’ or ‘internationally excellent’ research in all of the Research Excellence Framework Units of Assessment to which we made submissions. So, no matter where you’re based, at Imperial you’ll be entering an environment designed for success.



## SOUTH KENSINGTON CAMPUS



Our main teaching base is a site where engineers work alongside clinicians, scientists collaborate with designers and mathematicians rub shoulders with business experts. It’s a place where cutting edge facilities have transformed the interiors of Edwardian buildings; and the sharing of knowledge, ideas and experience does not just happen in the classroom or the lab, but also in conversations in the Senior Common Room, over a drink in the h-bar (reserved for postgraduate students and staff) or at cross-faculty events organised by the Graduate School.

There is plenty on campus to stimulate the thought processes. But the wonder of our South Kensington location, which Prince Albert’s nineteenth-century vision transformed into a centre for science, technology and the arts, is that we’re surrounded by so many other inspiring organisations, including three world class museums (the Natural History Museum, Science Museum and V&A Museum).

For more information about our neighbourhood, known locally as ‘Albertopolis’, see our aerial photograph on pages 26–27.

Find out how you can explore our South Kensington Campus, in person or online:  
[www.imperial.ac.uk/visit](http://www.imperial.ac.uk/visit)

# LIVE, LEARN, BE INSPIRED AND ENTERTAINED ALL IN ONE PLACE...

Imperial and its neighbours are the beating heart of 'Albertopolis', the realisation of Prince Albert's nineteenth-century vision for an area where science and the arts would come together. More than 100 years of history have done nothing to diminish this legacy: today, engineering meets design in our double Master's degrees with the Royal College of Art; taxonomy meets biodiversity in our joint Master's course with the Natural History Museum; while the neighbouring Royal Albert Hall ensures all of our students see their time at Imperial come to a spectacular close by hosting all of our graduation ceremonies.

**EXPLORE THE FUTURE OF DESIGN...**  
at the annual graduate show for our two unique double Master's degrees in engineering design, run jointly with the Royal College of Art. Past projects include a pop-up micro factory and an eye-tracking camera.

6 minutes

**TAKE A BALLET CLASS...**  
at the English National Ballet, catering for all levels, with concessions available for students.

5 minutes

**ENJOY PERFORMANCES...**  
by some of the world's finest artists in the stunning Royal Albert Hall, where all Imperial students also graduate. The Proms is one of the highlights in the calendar, with standing places available for as little as £6.

5 minutes

**ENTER THE WORLD OF MUSIC...**  
through the Royal College of Music's event series.

4 minutes

**FREE**

**SOAK UP THE SUNSHINE...**  
in Hyde Park and Kensington Gardens, two of the city's eight Royal Parks. The former regularly hosts major live music and sporting events while the latter is home to the Serpentine Gallery, displaying modern and contemporary art.

7 minutes

**QUEEN'S TOWER**  
The heart of our South Kensington Campus

**SEE NATURAL HISTORY COME TO LIFE...**  
in the award-winning Natural History Museum, home to around 70 million specimens, including some collected by Darwin.

4 minutes

**FREE**

**ENJOY ART SPANNING 3,000 YEARS OF HISTORY...**  
in the world's largest museum of decorative arts and design, the Victoria and Albert Museum (V&A).

4 minutes

**FREE**

**EXPLORE SCIENCE THROUGH THE AGES...**  
in the Science Museum, with the original model of DNA and the Apollo 10 command module among the displays.

3 minutes

**LEARN GERMAN...**  
from scratch or build on existing skills in classes at the Goethe-Institut.

3 minutes

**FEED YOUR SPIRIT OF ADVENTURE...**  
at events at the Royal Geographical Society.

4 minutes

Discover Imperial and this beautiful area of South Kensington through 360° photos, video tours and slideshows:  
[www.imperial.ac.uk/interactivemap](http://www.imperial.ac.uk/interactivemap)



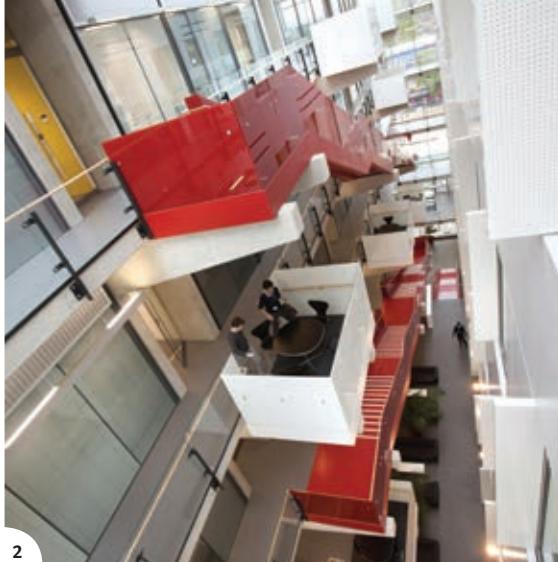
## MEDICAL CAMPUSES

Our medical students join thriving communities on our medical campuses. Each campus is based around a hospital with excellent transport links to and from our main campus in South Kensington. Most of our students are based at one of the following:

- ▶ Charing Cross Campus, Hammersmith
- ▶ Hammersmith Campus, East Acton (free shuttle bus available between here and the South Kensington Campus)
- ▶ Royal Brompton Campus, Chelsea
- ▶ St Mary's Campus, Paddington

A small number of students are based at the Chelsea and Westminster Campus and at hospitals within the London North West Healthcare NHS Trust (Northwick Park and St Mark's Hospitals in Harrow, Ealing Hospital in Middlesex and Central Middlesex Hospital in North Acton). We also have close collaborations with NHS staff based at Hillingdon, Harefield, West Middlesex and St Peter's Hospitals, along with mental health trusts and primary care providers across north-west London.

Our medical campuses are home to a number of world leading research facilities; there are also medical libraries at five of our campuses, which cover general medicine as well as a wide range of specialisms (varies by campus), and fitness gyms at our Charing Cross and Hammersmith Campuses which are free for all of our students to use.



## SILWOOD PARK, ASCOT

Students of ecology, evolution and conservation biology will find that the grasslands, marshland, woods and lake of our Silwood Park Campus have plenty to offer their studies.

Located approximately 25 miles west of central London in the village of Sunninghill, near Ascot in Berkshire, our 150 academic and research staff and 160 full-time postgraduates make up a close-knit community of scientists who enjoy ecological field and laboratory facilities, lecture

- 1 St Mary's Campus, Paddington
- 2 Imperial Centre for Translational and Experimental Medicine, Hammersmith Hospital, Acton
- 3 Silwood Park Campus in Ascot
- 4 London's White City, named after the white marble of the pavilions built for the 1908 Summer Olympics and the 1909 Imperial International Exhibition, is the site of our new state-of-the-art campus.

Find out more:  
[www.imperial.ac.uk/  
silwoodparkcampus](http://www.imperial.ac.uk/silwoodparkcampus)

theatres, sports facilities, and a natural sciences library specialising in ecology, evolution, biodiversity, conservation, plant and animal biology and entomology. There are also five halls of residence on site (see page 44).

The campus Students' Union and committee within the halls of residence organise a wide range of sports and social events throughout the year, including an annual music festival, Silfest.

## WHITE CITY CAMPUS

Our major new White City Campus is located just three miles from our South Kensington Campus and right next to our Hammersmith Campus. Currently under development, it represents a first for London as a base for researchers, businesses and healthcare to work alongside each other to drive forward new ideas, new technologies and innovations for the benefit of society on a local, national and global scale.

White City will house a range of state-of-the-art facilities, including the Molecular Sciences Research Hub, due to open in late 2017. Researchers from Imperial's Department of Chemistry will be among the first to take advantage of this new facility, which will connect to facilities for synthetic biology, data sciences and European Institute of Innovation and Technology hubs in climate, healthy living and digital, to create a molecular sciences 'neighbourhood'.

There will also be a Translation and Innovation Hub, housing co-located laboratories with major technology partners, plus Hackspace, new start-ups and fast-growth technology companies, and the Michael Uren Biomedical Engineering Research Hub, bringing together engineers, scientists and clinicians to focus on affordable medical technology. Our nearby Hammersmith Campus allows unique opportunities to further the College's extensive work in healthcare translation and collaborations with the NHS. The White City site also houses accommodation for over 600 postgraduates.



## STUDY RESOURCES

As a postgraduate student you will spend much of your time studying independently. But that doesn't mean working in isolation without access to help.

Our study resources are set up with you in mind – to make sure that you not only have access to first-class materials and facilities that you need to advance in your studies, you also have the support required to make the most of them.



## Free

document delivery service to help you source books and articles from around the UK and the rest of the world

170,000

electronic journals, books and databases, most of which can be accessed on and off campus



### LIBRARY SERVICES

The Central Library at South Kensington is the primary home for our print collections, and is open 24 hours a day (except Friday 23.00–Saturday 10.00) almost all year round. The long opening hours make it a popular place to study, with computers and wi-fi throughout the building; silent, quiet and group study areas; bookable rooms for project work and presentation practice; and a café serving food until late. You can borrow up to 40 items at any one time, with automatic renewals to help you stay on top of your loans.

### Training and support

Our library team are on hand to recommend the best information resources, deliver one-to-one or group training sessions to develop your search skills, and provide advice and guidance on publishing, copyright and plagiarism. We also have subject librarians for every department to provide tailored help and support with research relevant to your subject area. Disabled students can access dedicated services including longer book loans, specialist software and one-to-one sessions.

Find out more:  
[www.imperial.ac.uk/library](http://www.imperial.ac.uk/library)

### Campus libraries

There are smaller specialist medical libraries at the Charing Cross, Chelsea and Westminster, Hammersmith, Royal Brompton and St Mary's Campuses. Each library has books relating to general medicine, as well as its own specialist collection, covering areas such as:

- ▶ Medical ethics
- ▶ Neuroscience
- ▶ Psychiatry
- ▶ AIDS
- ▶ Emergency medicine
- ▶ Plastic surgery
- ▶ Paediatrics
- ▶ Radiology

Silwood Park Campus has its own life sciences library, specialising in ecology, evolution, biodiversity, conservation, plant and animal biology and entomology.

### IT SUPPORT

Our Service Desk offers year-round support and advice for students experiencing IT problems, from accessing email to using printers. Our Software Shop also provides free and discounted software, including free Microsoft Office 365 software for all students.

Find out more:  
[www.imperial.ac.uk/ict](http://www.imperial.ac.uk/ict)



# STUDENT LIFE



A student braves the bungee as part of Raising And Giving (RAG) week to raise money for charity.

We encourage all of our students to dive into life on campus. We offer a huge range of organised activities that are designed to inspire, educate, challenge and enrich, as well as giving you an outlet to take a break and have fun away from your studies.

# Work hard, play hard

The pace and intensity of postgraduate study at Imperial can be demanding so it's important to find time for outside interests. The choice of around 350 student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of new ways for you to enjoy your downtime.

## IMPERIAL COLLEGE UNION

Our students are the creators of life on campus; Imperial College Union is there to help it happen by providing funding, representation, support and space in its dedicated building on our South Kensington Campus. Our postgraduates enjoy their own representation through our Graduate Students' Union (GSU) and Academic Representation Network, as well as benefitting from hundreds of student-led clubs, societies and projects, an independent Advice Centre and a student media centre.



For an A-Z of student clubs, societies and projects:  
[imperialcollegeunion.org/  
a-to-z](http://imperialcollegeunion.org/a-to-z)



- 1 C&G Motor Club maintains its own fleet of powerful, race-worthy karts.
- 2 The Musical Theatre Society performs at the week-long ArtsFest, showcasing the artistic talents of our students.
- 3 The Cheese Society meets for lunch weekly.



[www.imperial.ac.uk/sport](http://www.imperial.ac.uk/sport)



- 4 Ethos sports centre, where facilities are sometimes used by visiting professional teams.
- 5 Basketball at Ethos
- 6 Parkour, Free Running and Gymnastics Society
- 7 Imperial College Symphony Orchestra
- 8 Community Connections volunteers



## SPORT AND FITNESS

The aim of sport at Imperial is to be as inclusive as possible. We've got no shortage of serious athletes, with our competitive clubs collectively achieving first place in London in the inter-university British Universities and Colleges Sport (BUCS) leagues 2015–16. Equally important is our range of intramural clubs and our Give it a Go scheme encouraging recreational participation. Students simply looking to keep fit have free\* access to gym and swimming facilities across all of our campuses, including at our flagship sports centre Ethos, which is also home to a year-round programme of exercise classes.

If you are aspiring to be, or already are, competing at national or international level you may be eligible for a sports scholarship to help you continue performing at the highest level.

## THE ARTS

With four orchestras, six choirs, a wind band and a jazz big band as well as a lunchtime concert series featuring world class performers, Imperial's extra-curricular music facility is the envy of many universities. You'll have plenty of space to refine your talents with ten music practice rooms available free of charge. Artists benefit from free art workshops, an art studio and an on-site gallery to display their work. Drama is also well served, with a Dramatic Society and Musical Theatre Society welcoming both performers and behind-the-scenes volunteers.

## VOLUNTEERING

It's not just through our research that we engage with the world beyond Imperial; our students also have a strong record for making a difference both in the local and global community. The Union's Community Connections volunteer service partners with over 100 external organisations to offer hundreds of volunteering opportunities, from tutoring in schools to community-based projects. Leadership opportunities also abound, challenging you to find new ways to respond to the needs of the community or to encourage your fellow students as the leader of an existing club, society or project.

\* A one-off fitness orientation fee applies (£40 in 2016–17) before you can use our high-spec gym equipment. Once completed, you can use the gym at any of our campuses for free.

# Supporting our students

We are focused on creating an environment where our postgraduate students can reach their full potential.

So when it comes to your health and well-being, we invest in support at every level to take you from strength to strength.

Find out more:  
[www.imperial.ac.uk/student-space](http://www.imperial.ac.uk/student-space)

## STUDENT HUB

The Student Hub brings together all of our key support services in one place on our South Kensington Campus, including: accommodation, admissions, exam arrangements, exchange programmes, student financial support and tuition fees, student records, visas, and well-being.



### DEPARTMENTAL SUPPORT

Every department has a comprehensive system of academic and pastoral care, including:

- ▶ your course director (taught students) or academic supervisor (research students), who will be your primary point of guidance and support throughout your time here;
- ▶ a dedicated Postgraduate Tutor and Director of Postgraduate Studies, who are responsible for the overall smooth running of your department's postgraduate teaching and research;
- ▶ a personal tutor (for Master's students on larger courses) and members of your research group (for research students); and
- ▶ a dedicated Departmental Disability Officer for disabled students.

You have the power to make real changes to your academic experience by providing feedback via the representative for your course or department, elected each year from amongst the student body.

### COLLEGE-WIDE SUPPORT

The academic and pastoral support provided by your department is complemented by a College-wide support network.

#### Personal support

There are a number of people you can approach for confidential support and practical guidance, including College Tutors, available to all students regardless of their subject, and independent advisors in Imperial College Union's Advice Centre.

#### Counselling and mental health advice

The Student Counselling and Mental Health Advice Service offers short-term individual counselling to all registered students, as well as Life Skills workshops. The service is free and confidential. Counsellors are available at our South Kensington and Hammersmith Campuses, and students can be referred to the Student Mental Health Advisor for advice and further support.

#### Healthcare

We have an NHS Health Centre and Dental Surgery at our South Kensington Campus providing a range of services to registered patients; students living outside the registration area are advised to register with a local GP.

#### Multi-faith Centre

Our multi-faith Chaplaincy in South Kensington has Chaplains from many different religions, as well as prayer rooms and information on places of worship, to support your spiritual and religious life.

#### Disability Advisory Service

Disabled students and those with a specific learning difficulty or enduring health or mental health condition can access free, confidential advice and support from our Disability Advisory Service. We encourage you to contact us in advance to discuss your needs: [disabilities@imperial.ac.uk](mailto:disabilities@imperial.ac.uk)

#### Students with children

The Early Years Education Centre at the South Kensington Campus provides 140 places for children aged six months to five years. Part-time places are available and you may be able to access financial help towards the costs. Please note, a waiting list applies.



Check out our Success Guide for study advice and resources:  
[www.imperial.ac.uk/success-guide](http://www.imperial.ac.uk/success-guide)

## INTERNATIONAL STUDENTS

### Dedicated support

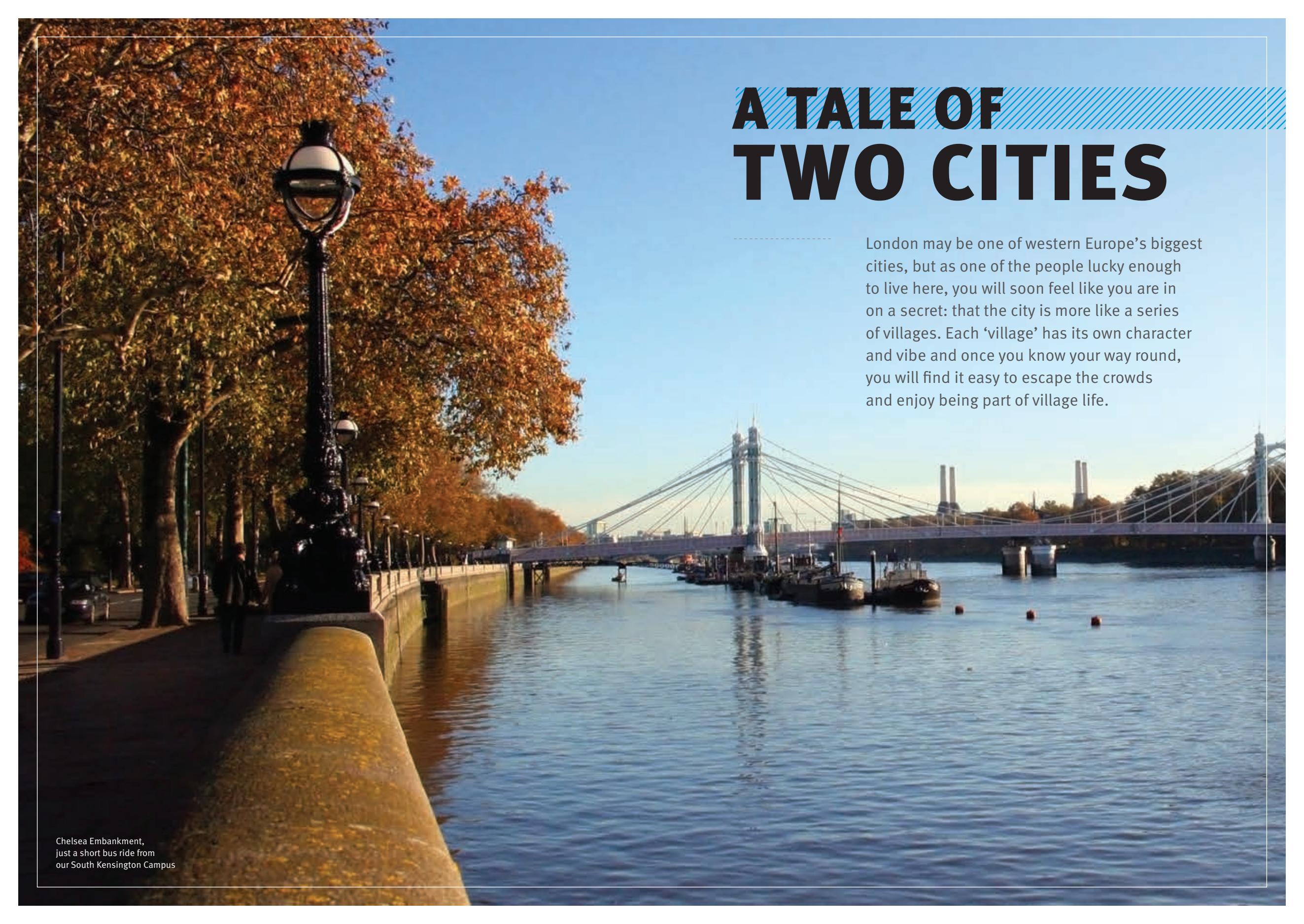
Our International Student Support team provides support for all our international students, including a year-round programme of events and UK trips. You will also benefit from a supportive social network of around 40 international and cultural student societies within Imperial College Union.

### Visa and immigration advice

Our trained advisors can provide you with expert advice on a wide range of visa and immigration issues, including extending your visa to continue your studies in the UK and working in the UK after you graduate (see page 124).

### English language support

Our Centre for Academic English at South Kensington provides free language support while you're studying, to improve your English in both an academic and social context (see page 125). Classes are also held at our Hammersmith Campus.



# A TALE OF TWO CITIES

London may be one of western Europe's biggest cities, but as one of the people lucky enough to live here, you will soon feel like you are in on a secret: that the city is more like a series of villages. Each 'village' has its own character and vibe and once you know your way round, you will find it easy to escape the crowds and enjoy being part of village life.

# Living in London

Home to over 300 languages and people of all different faiths, cultures and backgrounds, London is a place for everyone. And with a huge range of student discounts and many of the city's top attractions free to enjoy, life on a student budget doesn't have to mean sacrificing your social life.



## TRAVEL

London's extensive transport network makes it easy to get around. Options include the Tube, Docklands Light Railway, Overground, trams, buses, ferries and even a cable car. And with many buses running 24 hours a day and a 24-hour weekend Tube service launching in 2016, a taxi home is usually a luxury rather than a necessity. Full-time students can get 30 per cent off adult rate Travelcards and Bus and Tram Passes with an 18+ Student Oyster photocard. See: [www.tfl.gov.uk/photocard](http://www.tfl.gov.uk/photocard)

Cycling is a popular way to stay fit and save money. We have secure cycle storage on campus and you can buy gold-standard locks at a heavily discounted price from our Security Service. London is also home to an extensive pay-as-you-go bike hire scheme. You can use the Imperial Mobile app to find the nearest available bikes.



## STUDENT DISCOUNTS

Your student card is a passport to all kinds of discounts, from cinema tickets to clothes, restaurants to mobile phone deals. Many of the catering outlets on campus offer discounts for Imperial students, as well as seasonal special offers.

It pays when planning your weekly shopping or entertainment to check out discount sites such as [www.studentbeans.com](http://www.studentbeans.com) to find the most cost-effective ways of enjoying life in the capital. For more information on funding your studies, see pages 126–129.



London is brimming with British culture, from its four UNESCO World Heritage sites (the Tower of London, Maritime Greenwich, Westminster Palace and the Royal Botanic Gardens at Kew) spanning hundreds of years of British history, to its many royal attractions, including Kensington Palace, within walking distance of our South Kensington Campus.

## STUDYING AT IMPERIAL MEANS...

...being at the heart of a **global business community**, with lots of opportunities to engage with employers – the reputation of our graduates came in the top ten in a worldwide employer survey. QS World University Rankings 2015–16

...you are ideally placed to **attend interviews, undertake internships and start building a network of useful business contacts** at events and company presentations that could be invaluable to your career.

...opportunities to attend **public events run by professional societies** which have their headquarters in London, including the British Medical Association and the Royal Society.

...the chance to draw inspiration from **world class institutions** such as the Natural History Museum, the Science Museum and Kew Gardens, and be immersed in a dynamic **culture of enterprise and innovation**.



**THEATRE**

With over 40 theatres in the West End alone, plus a huge choice of fringe venues, London is world famous for its theatre. Musicals are a mainstay of the city's theatreland, but its dramas and comedies also draw much critical acclaim.

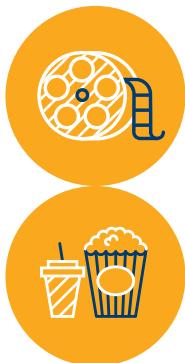
Back on campus, Imperial College Dramatic Society (DramSoc) performs at least two major productions each year, while our Musical Theatre Society sings and dances its way through an annual musical. Auditions are open to all and if you prefer to stay out of the limelight, there are opportunities for you to have a go at set design, lighting and sound, costume, props and make-up.

**CINEMA**

If London feels familiar, it's probably because you've spent years exploring its streets on the big screen. The city's iconic scenery makes it a top filming location, from Portobello Road market in *Notting Hill* to the extended street sequences in James Bond's *Skyfall*.

With close to 800, London is home to over a fifth of all of the UK's cinema screens so you'll be spoilt for choice. The city also regularly attracts Hollywood's biggest stars for premieres in Leicester Square.

You can make your own contribution to film at Imperial by getting involved in the Union's student-run cinema, with roles ranging from projection to advertising.

**MUSIC**

Pop-up venues, star-studded festivals, free gigs, classical concerts, arena tours – it's hard to sum up a musical scene which has nurtured such homegrown talents as Adele, Coldplay, David Bowie, Queen (who were formed at Imperial) and the Rolling Stones, while welcoming acts from all over the world. The huge choice of venues is as diverse as the acts they host, from iconic venues like the Royal Albert Hall, the Roundhouse in Camden and the O2 Academy in Brixton to the hundreds of lesser-known pubs and clubs hosting soon-to-be-famous bands. Musicians at Imperial will find plenty of support for their talents in our Blyth Music Centre.

**EATING AND DRINKING**

London's reputation as a trendsetter is most evident in its ever-expanding food scene. Your wallet will no doubt welcome the abundance of student discounts in the well-known chain restaurants, but in a city where street food from around the world thrives, enjoying new food experiences doesn't necessarily mean blowing your budget.

And it's not just street vendors that will tempt you: the city's huge choice of pop-up restaurants and the explosion of the supper club scene means it's easy to be adventurous. But don't worry if you'd prefer to stick with familiar favourites as you can find cuisine from just about every country across the city, as well as many international supermarkets.

**STUDENT SAFETY**

For a city of its size and population (more than eight million people), the level of crime in London is relatively low, and much of the crime is opportunistic so taking sensible precautions will help you stay safe.

**No. 1**

London is the UK's best student city and fifth best in the world, according to the QS Best Student Cities ranking 2016

We have our own Security Service within the College which is dedicated to making our campuses safe places to live and work: we have campus-wide CCTV, monitored live by our 24-hour control room staff; access control in all buildings and residences; an emergency response team on standby at all times; and a dedicated Crime Investigation and Prevention Officer available for advice and support. We also work closely with police liaison officers to deliver safety briefings throughout the year and personal safety campaigns with Imperial College Union.



# Postgraduate accommodation



## GRADPAD GRIFFON STUDIOS



## GRADPAD ORIENT HOUSE

Visit [gradpadlondon.com](http://gradpadlondon.com) for more details, photos and floorplans



## GRADPAD WOOD LANE STUDIOS

GradPad's accommodation has been purposely built for postgraduate students studying across London. All three GradPad locations offer easy access to public transport, making it convenient for you to travel to and from the College and make the most of studying in one of the world's most exciting cities.

566 self-contained studio apartments with kitchenette and private shower room. Located directly across the road from Clapham Junction railway station for access to Imperial's west London campuses and Silwood Park (via Sunningdale station).

184 rooms ranging from en suite bedrooms with shared kitchen and lounge facilities to self-contained studio apartments. Located in Fulham, close to Imperial Wharf Overground station and within easy travelling distance of Imperial's west London campuses.

606 self-contained studio apartments, all with a double bed, study area, kitchenette and en suite shower room. Part of our White City Campus and close to Hammersmith medical campus for easy access to the hospital.

### PRICE

From £229 per week, inclusive of utilities

From £210 per week, inclusive of utilities

From £229 per week, inclusive of utilities

### FACILITIES AT ALL GRADPAD SITES

- ▶ Broadband
- ▶ 24-hour security
- ▶ CCTV monitoring
- ▶ Secure bike storage (excluding Orient House)
- ▶ En suite rooms
- ▶ Free on-site gym (excluding Orient House)
- ▶ Garden area (excluding Orient House)

- ▶ Shared lounge
- ▶ Female-only corridor
- ▶ Couples rooms available
- ▶ On-site laundry
- ▶ Quiet study room (Wood Lane only)

Please note that all prices relate to academic year 2016–17. Please check the website for prices relating to 2017 entry when these are updated in spring 2017.



## SILWOOD PARK, ASCOT

Students studying at Silwood Park can choose from single and couples accommodation (102 bed spaces in total) in one of the College's five halls of residence. The campus's parkland makes it the perfect setting for ecological field experiments, while still delivering a good social life, supported by Silwood Park Campus Union.

### PRICE

From £88 per week, inclusive of utilities

### FACILITIES AT THIS SITE

- ▶ Broadband
- ▶ Shared kitchen and bathroom
- ▶ On-site laundry
- ▶ Free access to sports facilities
- ▶ Car parking (with permit)

## HOW TO APPLY

### GRADPAD

To book a room/studio, visit the GradPad website:

- ▶ Pick your desired GradPad location
- ▶ Pay a £100 booking fee (non-refundable)
- ▶ Pay a £400 deposit (refundable at the end of your tenancy. Cancellation policies apply.)

If you want to arrange a guided tour of a show flat at your chosen site before you book, email [info@gradpadlondon.com](mailto:info@gradpadlondon.com) or call +44 (0)20 3489 5853. For answers to common queries about GradPad accommodation see: [www.gradpadlondon.com/faq](http://www.gradpadlondon.com/faq)

### SILWOOD PARK

Students who have accepted an academic offer for a course at Silwood Park will be invited to apply online for College accommodation at this site (applications open from May onwards in your year of entry). You will be able to choose room type and price band combinations.

### ACCESSIBLE ACCOMMODATION

GradPad's Griffon Studios and Wood Lane Studios have large rooms suitable for disabled students – book before 1 August in your year of entry to be eligible.

Accessible accommodation is also available within Mary Flowers Hall at Silwood Park. If you are disabled or have requirements that will affect your choice, please contact our Disability Advisory Service: [disabilities@imperial.ac.uk](mailto:disabilities@imperial.ac.uk) or +44 (0)20 7594 9755.

### OTHER OPTIONS

If these housing options are not for you, we can help you find privately rented accommodation elsewhere (see pages 46–47 for more details).

### ANY QUESTIONS?

Contact our Student Hub team (see page 47).

Find out more:  
[www.imperial.ac.uk/accommodation](http://www.imperial.ac.uk/accommodation)

## PRIVATE ACCOMMODATION



### WHERE DO I START MY SEARCH?

Many postgraduate students find accommodation in shared houses, flats or studio flats. London has a huge range of privately rented housing, but don't panic if you don't know where to start as Imperial's Student Hub team can provide plenty of advice and support.

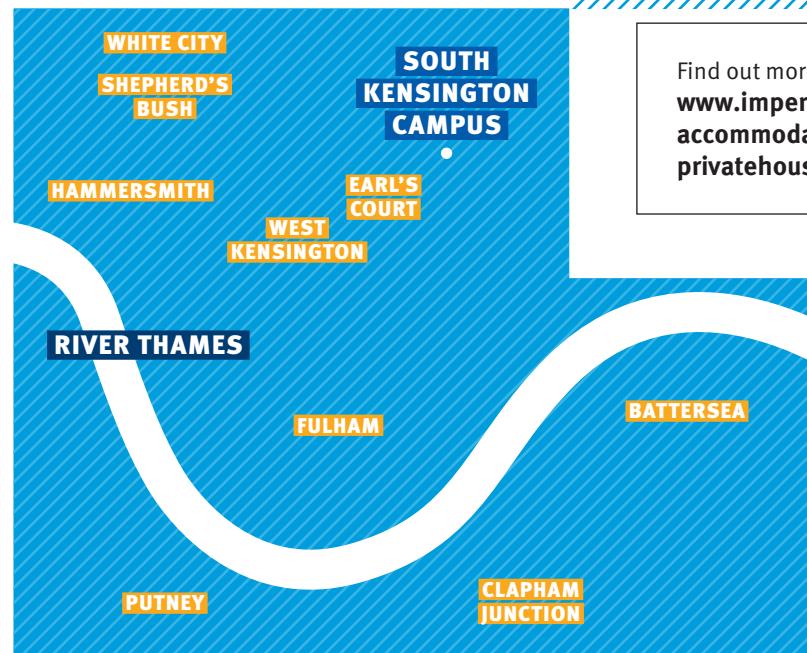
Accommodation costs will account for a large part of your living expenses so it's important to be realistic about what you can afford. Also be aware of journey times to and from the College, and make sure that you balance price with practicality. The London Rents Map provides a useful overview of rent rates: [www.london.gov.uk/rents](http://www.london.gov.uk/rents)

Some of the popular areas for Imperial students within easy travelling distance of our South Kensington Campus are shown on the map below.

The speed at which the private rental market moves in London means you do have to act fast if you find somewhere you like. However, other properties will always become available so don't feel pressured to accept a property that will stretch your budget too far.

Also, don't forget about the additional bills that you may face including electricity, gas, TV licence and internet charges. For more information on funding your studies, including the new postgraduate Master's loans, see pages 126–129.

### Popular areas to live



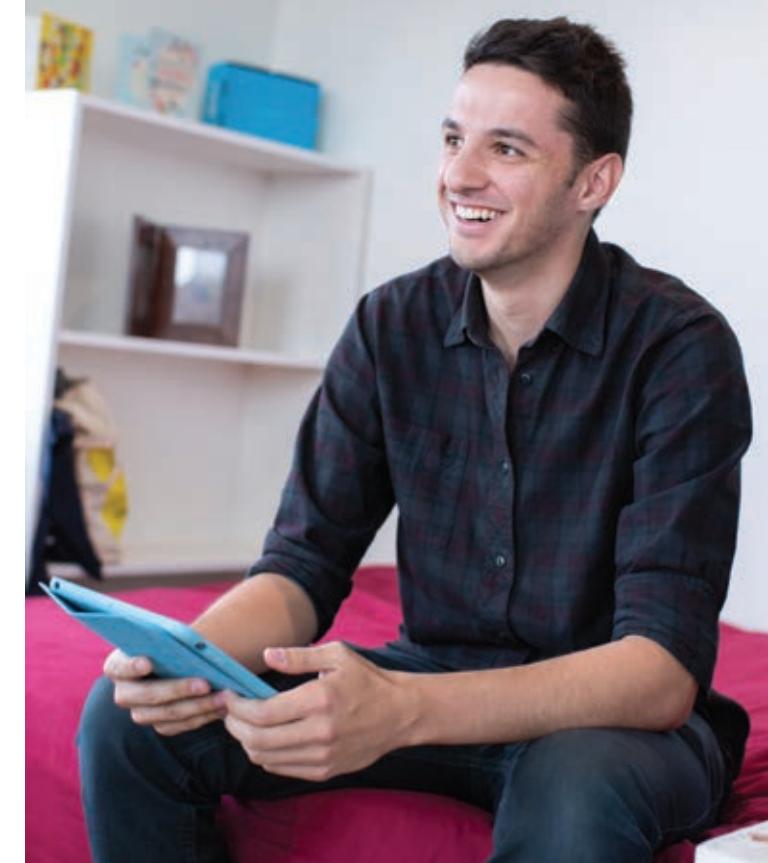
Find out more:  
[www.imperial.ac.uk/  
accommodation/  
privatehousing](http://www.imperial.ac.uk/accommodation/privatehousing)



### HELP WITH YOUR SEARCH

To help you navigate London's huge choice of properties, we run an online property search website exclusively for Imperial students. Imperial Home Solutions is a great tool for finding rented properties offered by private landlords or other students. You can search by type and size of property, price, area and travel time, and create your own property shortlist.

Imperial Home Solutions is also useful for connecting with potential flatmates via the messageboard, as well as accessing useful information to help with your search, including a checklist of what to look for when viewing properties and advice on contracts and deposits.



[www.imperialhomesolutions.co.uk](http://www.imperialhomesolutions.co.uk)

### VISIT THE STUDENT HUB

We strongly recommend being in London to conduct your search for privately rented property as you will need to go on viewings and explore the surrounding area before you can make an informed decision.

Being in London also means you can benefit from the range of practical help and advice that Imperial's Student Hub team can provide from their base on our South Kensington Campus.

The Hub is open year-round during office hours on weekdays, including lunchtimes.

For further advice,  
talk to our friendly team:  
[www.imperial.ac.uk/  
studenthub](http://www.imperial.ac.uk/studenthub)

The Hub's range of accommodation services includes:

- ▶ Private Housing Guide, with hints and tips on house hunting
- ▶ Lists of estate agents' properties
- ▶ Detailed advice on tenancy agreements
- ▶ Area guide and postcode maps
- ▶ Details of estate agents, hostels and hotels
- ▶ Annual housing events to assist with your search

# YOUR STUDY OPTIONS

Imperial offers many different options for postgraduate study. Which route is right for you will depend on a number of factors, including the level of degree you currently hold, which subject you are interested in and your career goals.

This section outlines some of the typical study routes you can follow, with examples of the careers that former students have gone into. As an Imperial degree is highly valued by all kinds of employers across the world, these are provided as a guide only.

Whichever qualification you choose you will be supported by the Graduate School's professional development programme to help you develop the skills needed in both your academic studies and future career (see page 14).



# Master's qualifications

Most of our Master's courses are available on a full-time basis and normally last 12 months with little break. There are also some two- and three-year part-time courses (see pages 132–136).

All courses include a taught programme of lectures, seminars and labs (if appropriate to your subject). You will also have the chance to master new techniques and skills by completing a significant piece of research.

## SOME OF OUR GRADUATES...



**Sondu Hassounah**  
MPH 2012  
A World Health Organisation researcher in the WHO Collaborating Centre for Public Health Education and Training



**Alok Gupta**  
MSc Mathematics and Finance 2006  
Uses his data science skills to manage the fraud and trust team at Airbnb

## MASTER OF RESEARCH (MRes)

**What** → A research-orientated route offering greater independence of learning and increased specialisation for those intending to undertake extensive research. It includes a substantial research project accounting for at least 50 per cent of the programme, and provides a good foundation for doctoral study or a research career.

**Career path** → Further research either as a research assistant or PhD student. Many of our courses are science-based and therefore lead to scientific positions.

### Alumni include:

- ▶ R&D engineer
- ▶ Marine conservationist
- ▶ Biomedical scientist
- ▶ Research technician

## MASTER OF SCIENCE (MSc)

**What** → Provides in-depth training in a specialist subject as well as an opportunity to hone your expertise and develop your research and/or technical skills. It combines taught material with an element of independent research, normally assessed in the form of a substantial dissertation or report.

**Career path** → Very flexible, providing the foundation for specialisation or diversification into a different sector/industry. Also often the route onto a graduate programme or into a more specialised role.

### Alumni include:

- ▶ Formula 1 aerodynamicist
- ▶ Senior research associate
- ▶ Digital marketing specialist
- ▶ Genetic technologist
- ▶ Nuclear engineer
- ▶ Environmental consultant
- ▶ TV researcher

## MASTER OF PUBLIC HEALTH (MPH)

**What** → Combines taught material with a compulsory dissertation and placement as a public health professional. Includes a specialist stream in global health for students who want to understand the health, economic, political, social and biomedical challenges and innovations associated with poor health worldwide.

**Career path** → Public health practice and related fields.

### Alumni include:

- ▶ Medical educator
- ▶ Public health intelligence analyst
- ▶ Management consultant



## MASTER OF EDUCATION (MEd)

**What** → Founded in research but also includes taught material and a compulsory dissertation. At Imperial, the MEd is offered in Surgical Education.

**Career path** → Progression in an established career in the field.

### Alumni include:

- ▶ Surgical registrar
- ▶ Consultant anaesthetist
- ▶ Doctor
- ▶ Medical researcher

## MASTER OF BUSINESS ADMINISTRATION (MBA)

**What** → For people in a demanding job who want to accelerate or change their careers. Available within Imperial College Business School as a full-time, online and weekend-only programme.

**Career path** → Requires three or more years' prior work experience. The Imperial MBA is ideally suited to those with a strong specialised or technical background, now seeking to progress into strategic and leadership roles.

### Alumni include:

- ▶ Global sourcing manager
- ▶ Creative consultant
- ▶ Investment director
- ▶ Risk analyst
- ▶ Currency trader

## POSTGRADUATE CERTIFICATES (PG Cert) AND DIPLOMAS (PG Dip)

**What** → Full- or part-time courses which can be taken on their own or, in some cases, can be used to build towards an MSc. A PG Certificate has a credit value of at least 30 ECTS and typically involves nine months' part-time study. A PG Diploma is similar but typically lasts two years part-time and therefore has a credit value of at least 60 ECTS. See our course list on pages 132–136 to find out where these are available.

## MASTER'S STUDY: WHAT TO EXPECT

### STUDY INTENSITY

The pace of Master's study is usually significantly faster than undergraduate study, requiring a commitment to a sustained period of work right from the start.

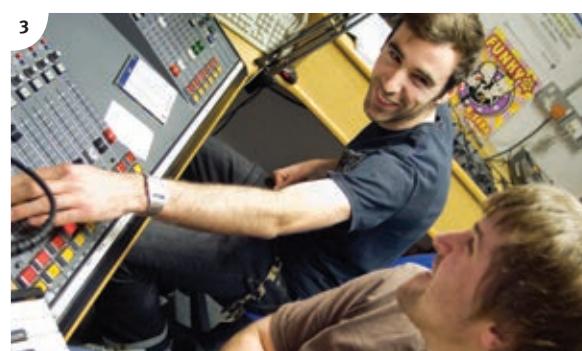
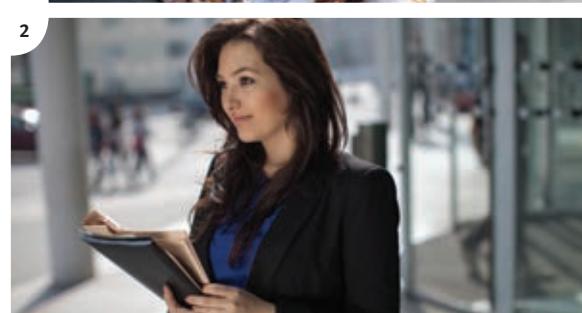
Most postgraduate students feel under time pressure at some point. This is normal and is a reflection of the intensity and amount of work undertaken. The Graduate Students' Union and the Graduate School organise lots of events throughout the year to help you maintain a good work-life balance.

In addition to the taught element, you will be expected to undertake more directed background reading and to arrive at solutions for yourself. The success of your experience will rely on your ability to set your own study targets and motivate yourself. But greater independence doesn't mean you'll be on your own – we also have a comprehensive network of academic and pastoral support in place to help you get the most out of your experience (see pages 36–37).

### TEACHING STYLE

Master's level study involves learning new technical skills and requires you to think about concepts and methods more deeply and critically. You will still attend lectures, seminars and labs (if appropriate to your subject). However, you will be expected to spend much of your time working independently or in groups, and group work may form part of your assessment.

Your lecturers will teach on the course; give you reading lists; make support materials available; set practicals, formal and less formal assessments; offer research projects (although for some courses you may be expected to develop your own ideas); and give you feedback on your progress in various ways. You need to take these opportunities and shape them to your own needs and interests.



- 1 MA/MSc Innovation Design Engineering students have developed a device to demonstrate how people living with quadriplegia could compete with able-bodied people in clay pigeon shooting.
- 2 Anna-Margarita Papadakes became a brand consultant and strategy trainer at Google after graduating with an MSc in Management in 2012.
- 3 MSc Science Media Production students at the student radio station, IC Radio.

### RESEARCH PROJECT

We place great emphasis on the integration of our Master's level courses with our world class research portfolio. Your degree will normally include a significant piece of research that will be submitted as a report or dissertation. You may also undergo an oral examination on your work. MRes students may undertake more than one project, with this component accounting for more than 50 per cent of the final degree award.

The quality of your own understanding, thinking and initiative are very important in the research project. You will pose questions and seek answers by using and applying techniques and research skills, analysing data and reviewing literature.

On most courses there is a period of several months with little scheduled teaching when the bulk of the research project is carried out, requiring you to plan your time effectively.

Your project will normally be supervised by an academic member of staff. However, they may delegate some of the day-to-day supervision to a member of their team, such as a PhD student, who can give you more practical advice.

### TRAINING AND SUPPORT

Your course director, personal tutor (for larger courses) and lecturers are the first point of contact for help and support in your studies. They can, for example, set up additional study opportunities such as extra reading, teaching or online study. We also encourage you to take advantage of training opportunities like the Graduate School's MasterClass programme. These courses are specifically designed to develop the personal and professional skills of Master's level students (see page 14). The Library also offers one-to-one and group training sessions (see page 30).

Every department has a staff-student committee, where elected representatives from the student body have input into the teaching that takes place within the department. We also have a College-wide support network to look after your general well-being (see pages 36–37).

All new students are invited to attend Welcome Week at the start of their first term. This includes a programme of activities, talks and events for postgraduates to introduce you to College life, current students and staff.

### DOING PAID WORK WHILE STUDYING

Our degrees are very demanding so we recommend that full-time students do not work during term time. If this is unavoidable, we advise you to work no more than 10–15 hours per week, which should be principally at weekends.

For information on funding your studies, including the new Postgraduate Loans for Master's study, see pages 126–129.

# Research qualifications

The most common type of research programme is the PhD. The majority of our academic departments offer PhD opportunities. We also offer a new way of training PhD students – through our Research Council-funded PhD training centres (see pages 62–63).

Medically qualified professionals who are looking to make a unique contribution to the knowledge in their clinical speciality may be interested in our MD(Res) qualifications.

## SOME OF OUR GRADUATES...



**Dr Lesley Drake**  
PhD Epidemiology 1993  
Executive Director, Partnership for Child Development; Deputy Director, London Centre for Neglected Tropical Diseases



**Dr Veronica Bray**  
PhD Planetary Science 2009  
Science team member of NASA's New Horizons and Cassini missions; Targeting Specialist for NASA's HiRISE Camera



**Dr Gareth Davies**  
PhD Physics 1994  
CEO of Kwiziq.com, a software programme that uses artificial intelligence to teach languages



**Dr Ning Chen**  
PhD Chemical Engineering 2012  
Founded Promegene, which offers gene sequencing technology services to hospitals

## PhD

**What** → This is the most common kind of research programme. Normally it takes three years full-time to complete, the majority of which is spent carrying out original research.

The majority of Imperial's PhD students attend the College on a full-time basis. However, some choose to attend part-time, involving one to three days of study per week. The study period is intensive and involves a series of milestones of progression, which you must meet along the way (see page 57).

**Career path** → Extremely diverse, both within and outside academia. Often followed by further research as a postdoctoral researcher within a university.

- 1 The experimental rooftop garden at Eastside hall of residence was created in April 2014. The team is carrying out research to test the effectiveness of green roofs in terms of reducing temperature and managing rain water runoff.
- 2 So much data is generated by experiments at the Large Hadron Collider in Geneva that CERN has chosen to spread the workload to computing centres and researchers around the world, including at Imperial.

## Split PhD scheme

Under the Split PhD scheme you may be permitted to carry out some of your research abroad, either in the field or at an overseas institution. Arrangements are normally confined to institutions with which the College has established links and in cases where the research problem requires local field work, for example, the study of a particular aspect of geology or biology. If your proposal for a Split PhD is approved, you will be required to be in physical attendance at the College for a minimum of 12 months out of the normal 36 months duration of a PhD programme.

## Partner Research Institution (PRI) scheme

If you work in a public research institution, industrial research laboratory or at another university then you may be able to register for a PhD at Imperial but carry out the research where you work, under our Partner Research Institution (PRI) scheme.

You should expect to spend at least two months per year at the College and the qualification is awarded by Imperial only. One of our major PRI schemes is with Singapore's Agency for Science, Technology and Research (A\*STAR), which involves two years of study in Singapore and two years in London.

## EngD

**What** → A four-year research degree of similar standing to a PhD. Most of your time (50–75 per cent depending on the project) is usually spent on an industrial placement, undertaking research on behalf of your host company. You also spend around nine months taking advanced technical and managerial courses.

## MD(Res)

**What** → Aimed at clinicians. Often shorter and more focused on clinical research than a PhD.



## RESEARCH PROGRAMMES: WHAT TO EXPECT

Choosing a research programme means embarking on one of the most intensive study experiences of your academic career so far. Working largely independently, under the supervision of our experts, you'll be focused on making new discoveries and contributing new knowledge in your chosen field.



### OUR RESEARCH APPROACH

We place a lot of importance on working across subject boundaries and the need to establish peer groups across departments. To help with this, we organise a range of development activities that bring together students from across the College.

As a global university with many international partners, we can offer you the chance to develop global research skills via our international doctoral summer schools, which give you the chance to collaborate with peers from our partner institutions.

All of our research programmes are supported by an integrated programme of professional development, to ensure you develop as a well-rounded researcher and gain the skills and experience you need to successfully complete your degree and move forward in your career. We work hard to ensure you have access to support throughout your time here, both at departmental level and College-wide (see pages 14–17).

These state-of-the-art facilities house some of the animals that the College works with to improve our understanding of the basic biology of infection, injury and chronic disease. Imperial believes that, in cases where no other alternatives exist, the use of animals in research is an essential step for finding new treatments and cures, and vital for improving human and animal health and welfare. Staff are trained to treat animals in the College's care with the fullest respect and to show due consideration at every level.



PhD student Michael Merlin investigating a power inverter in the Maurice Hancock Smart Energy Laboratory.

### PLANNING YOUR TIME

If you're studying full-time, you should aim to complete your PhD in 36 months and submit your thesis for examination no later than 48 months from the date of initial registration.

#### Early stage (0–9 months)

At nine months you will undertake an assessment involving the submission of a written report and an oral examination on that report. The Graduate School provides training in key skills such as presenting, statistics, writing and personal effectiveness that will help you prepare.

#### Mid-stage (9–18 months)

You will continue with your programme of research and undertake further professional skills training.

#### Late stage (18–24 months)

You will undertake a late-stage assessment, conducted by your department, to see whether you have a realistic research plan in place for successfully completing the programme.

Throughout the programme you will take a full part in academic life, attending seminars and presenting your research. You may also have the chance to attend national and international conferences.

### YOUR THESIS

The main activity of any research programme is to carry out an original research project under the direction of one or more supervisors, to be written up as a thesis. Your supervisor will read your thesis thoroughly and make constructive comments on both style and intellectual content before you submit it.

Your thesis will be examined by a minimum of two examiners: one from within the College and one from academia, industry or another profession. You will defend your work in a viva (oral examination).

The Graduate School provides training in both thesis writing and preparing for the viva.

### TEACHING OPPORTUNITIES

Many PhD students are involved with the teaching, supervision and assessment of both undergraduate and Master's students.

Working as a Graduate Teaching Assistant (GTA) enables you to broaden your knowledge base and gain communication and task management experience. To support our GTAs, the Graduate School and the College's Educational Development Unit have developed a graduate teaching assistant training programme (STAR). STAR provides PhD students with the chance to obtain Associate Fellowship of the Higher Education Academy – a qualification increasingly sought by employers across the education sector.

# Global Challenge Institutes

One of our greatest strengths is our ability to bring together multidisciplinary research teams.

[www.imperial.ac.uk/study/pg/  
global-challenge-institutes](http://www.imperial.ac.uk/study/pg/global-challenge-institutes)

Our six Global Challenge Institutes are fantastic examples of this commitment to interdisciplinary working, which is aimed at addressing some of society's biggest challenges. Alongside our traditional academic departments, the institutes interface with a wide range of external customers and stakeholders and lead the College's input to policy setting across government and business.

If you have an idea for a PhD that falls within the remit of one of our Global Challenge Institutes\* please contact them directly to discuss before making a formal application to the College.



## ENERGY FUTURES LAB

Energy Futures Lab is a cross-departmental institute. It acts as the focus for energy research across five themes: clean fossil fuels; energy infrastructure; low carbon transport; policy and innovation; and sustainable power.

The Institute's team of experts from science, engineering, policy and economics work together to produce an integrated view of future energy supply, demand and distribution. They draw on Imperial's wealth of knowledge in technologies such as fossil fuel engineering, renewable energy resources, fuel cells and carbon capture and storage. This is underpinned by the College's proven track record in innovation and entrepreneurship.

\* Energy Futures Lab does not offer PhD programmes but does deliver the MSc in Sustainable Energy Futures, based in the Department of Mechanical Engineering – see pages 84–85.

## DATA SCIENCE INSTITUTE

Data science deals with collecting, preparing, managing, analysing, interpreting and visualising large and complex datasets – the type of data that is increasingly generated in modern scientific research.

The Data Science Institute provides a focal point for Imperial's capabilities in multidisciplinary data-driven research by College scientists and partners. The Institute Hub provides a physical space on Imperial's South Kensington Campus for next generation data visualisation facilities, including the KPMG Global Data Observatory, which will provide an immersive digital canvas for decision-making – the largest of its kind in Europe.



## GRANTHAM INSTITUTE – CLIMATE CHANGE AND THE ENVIRONMENT

The Grantham Institute harnesses the College's tremendous research strengths to address climate change and environmental issues, advancing our understanding of climate processes, environmental impacts and mitigation technologies and policies.

The Institute provides postgraduate training opportunities through the Science and Solutions for a Changing Planet Doctoral Training Partnership (SSCP-DTP) and also at Master's level, equipping graduates with the broad range of interdisciplinary skills needed to tackle the challenges of environmental change. For information about our MSc in Climate Change, Management and Finance, see page 113.

## INSTITUTE FOR SECURITY SCIENCE AND TECHNOLOGY

The Institute for Security Science and Technology addresses multi-faceted challenges in security and resilience, in the physical environment, in cyber space and at their interface. The Institute provides an established and trusted environment for government and industry to expose security requirements to the academic sector and develop solutions for protecting people and infrastructure.

The Institute leads Imperial's Academic Centre of Excellence in Cyber Security Research, one of 13 nationally recognised centres, as well as directing the government-funded Research Institute in Trustworthy Industrial Control Systems.

## INSTITUTE OF GLOBAL HEALTH INNOVATION

The Institute of Global Health Innovation (IGHI) supports the development and widespread distribution of healthcare innovation with the aim of reducing inequalities in global healthcare for generations to come.

Over 160 clinicians, engineers, scientists, psychologists, policy analysts, data specialists, healthcare managers, economists, industrial designers and entrepreneurs work together on global health policy development, technological innovation, medical robotics, healthcare design and cutting edge research into nutrition and the gut microbiome.



- 1 The Hamlyn Centre, part of the IGHI, is a champion for technological innovation and clinical adoption of robotic, minimally invasive surgery.
- 2 Professor Alan Armstrong from the Department of Chemistry is an affiliate of IMSE. The core expertise of the Armstrong group is synthetic organic chemistry, and his team collaborate with engineers to develop more sustainable manufacturing processes.

1



2

## INSTITUTE FOR MOLECULAR SCIENCE AND ENGINEERING

The Institute for Molecular Science and Engineering (IMSE) draws on the strengths of the College's Faculties, from molecules to systems, to address some of the world's most pressing challenges. It tackles problems where molecular innovation plays an important role, such as carbon utilisation and the molecular engineering of antimicrobial surfaces.

The Institute provides a stimulating programme of seminars and events for researchers from a diverse range of specialisms to communicate and collaborate, and connects them with a wide spectrum of stakeholders to enhance discovery and innovation. We also offer an interdisciplinary MRes in Molecular Science and Engineering (see page 71).

[www.imperial.ac.uk/  
study/pg/global-  
challenge-institutes](http://www.imperial.ac.uk/study/pg/global-challenge-institutes)



Apply for the 2017 PhD programme:  
[www.crick.ac.uk/about-us/  
jobs-and-study/phd-students/  
student-recruitment](http://www.crick.ac.uk/about-us/jobs-and-study/phd-students/student-recruitment)

## THE FRANCIS CRICK INSTITUTE

Imperial is a university partner of The Francis Crick Institute, an entirely new interdisciplinary institute with a distinctive vision of how medical research should be conducted.

The Crick's work aims to understand why disease develops and find new ways to treat, diagnose and prevent illnesses such as cancer, heart disease, infections and neurodegenerative diseases. Researchers at the institute are world leading scientists and collaborate with the very best at London's top scientific universities.

The Crick is committed to engaging and inspiring the public, and Imperial-Crick PhD students will benefit from outreach communications training and opportunities. The institute is looking for highly motivated and exceptionally talented individuals to enrol on its unique, four-year collaborative PhD programme and embark on their career in biomedical research.

## MULTIDISCIPLINARY TRAINING AND SUPERVISION

Imperial-Crick PhD students will be co-supervised by world class scientists across disciplines at both the Crick and the College, as well as receiving training from the Crick and Imperial's Graduate School.

## STATE-OF-THE-ART FACILITIES

Students will have access to cutting-edge science technology platforms and world class facilities, both within the Crick's labs and at Imperial.

## AN IMPERIAL DEGREE

All Imperial-Crick students are registered at the College and receive their PhD from Imperial.

## FULL FUNDING

The institute's PhD programme provides tuition fees, an annual stipend of £22,000 and consumables funding for all students.

# PhD training centres

We want to train our postgraduates to tackle society's big challenges in a way that draws on the talent and imagination housed across the College.

[www.imperial.ac.uk/  
study/pg/courses/  
phd-training-centres](http://www.imperial.ac.uk/study/pg/courses/phd-training-centres)



One way we do this is through our government-funded PhD training centres. Imperial is the lead institution in 12 of the UK's 113 Engineering and Physical Sciences Research Council (EPSRC)-funded Centres for Doctoral Training (CDTs) – more than any other UK university. We're also home to a number of Doctoral Training Partnerships (DTPs) funded by other government research councils, such as the Natural Environment Research Council (NERC).

Both types of training centre offer a new way of achieving your PhD, with CDT research tending to be more focused, whereas research within a DTP can span a wide variety of areas. Features of our PhD training centres include:

## INTERDISCIPLINARY TRAINING

Students are recruited from across a broad spectrum of disciplines to join researchers from departments across the College.

## PEER SUPPORT

Each cohort begins their training at the same time, enabling them to form close bonds through the years and draw support and inspiration from each other.

## PROFESSIONAL DEVELOPMENT

Professional skills training is an integral part of the experience.

## FULLY-FUNDED

Fully-funded studentships are available for Home students, and EU students who have been resident in the UK for the previous three years. Some training centres also consider international candidates who have their own funding for non-funded projects.

See our department pages (64–117) to explore whether there are CDT/DTP opportunities in the area of study that you're interested in.



# IMPERIAL-LED CENTRES

## EPSRC CENTRES FOR DOCTORAL TRAINING

**Advanced Characterisation of Materials**  
[www.cdt-acm.org](http://www.cdt-acm.org)

**Controlled Quantum Dynamics**  
[www.imperial.ac.uk/  
controlledquantumdynamics](http://www.imperial.ac.uk/controlledquantumdynamics)

**Fluid Dynamics across Scales**  
[www.imperial.ac.uk/fluids-cdt](http://www.imperial.ac.uk/fluids-cdt)

**High Performance Embedded and Distributed Systems**  
<https://wp.doc.ic.ac.uk/hipeds>

**Chemical Biology**  
[www.icb-cdt.co.uk](http://www.icb-cdt.co.uk)

**Mathematics of Planet Earth**  
[www.mpecdt.org](http://www.mpecdt.org)

**Neurotechnology for Life and Health**  
[www.imperial.ac.uk/neurotechnology/cdt](http://www.imperial.ac.uk/neurotechnology/cdt)

**Nuclear Energy**  
[www.imperial.ac.uk/nuclear-cdt](http://www.imperial.ac.uk/nuclear-cdt)

**Plastic Electronic Materials**  
[www.imperial.ac.uk/plasticelectronics/pecdt](http://www.imperial.ac.uk/plasticelectronics/pecdt)

**Sustainable Civil Engineering**  
[www.imperial.ac.uk/sustainablecivilengineering](http://www.imperial.ac.uk/sustainablecivilengineering)

**Theory and Simulation of Materials**  
[www.imperial.ac.uk/  
theoryandsimulationofmaterials](http://www.imperial.ac.uk/theoryandsimulationofmaterials)

**Quantitative Non-Destructive Evaluation**  
Offers PhD and EngD opportunities  
[www.rcnde.ac.uk/home-cdt](http://www.rcnde.ac.uk/home-cdt)

## OUR DOCTORAL TRAINING PARTNERSHIPS INCLUDE:

**Science and Solutions for a Changing Planet DTP (funded by NERC)**  
[www.imperial.ac.uk/grantham/  
education/science-and-solutions-for-a-changing-planet-dtp](http://www.imperial.ac.uk/grantham/education/science-and-solutions-for-a-changing-planet-dtp)

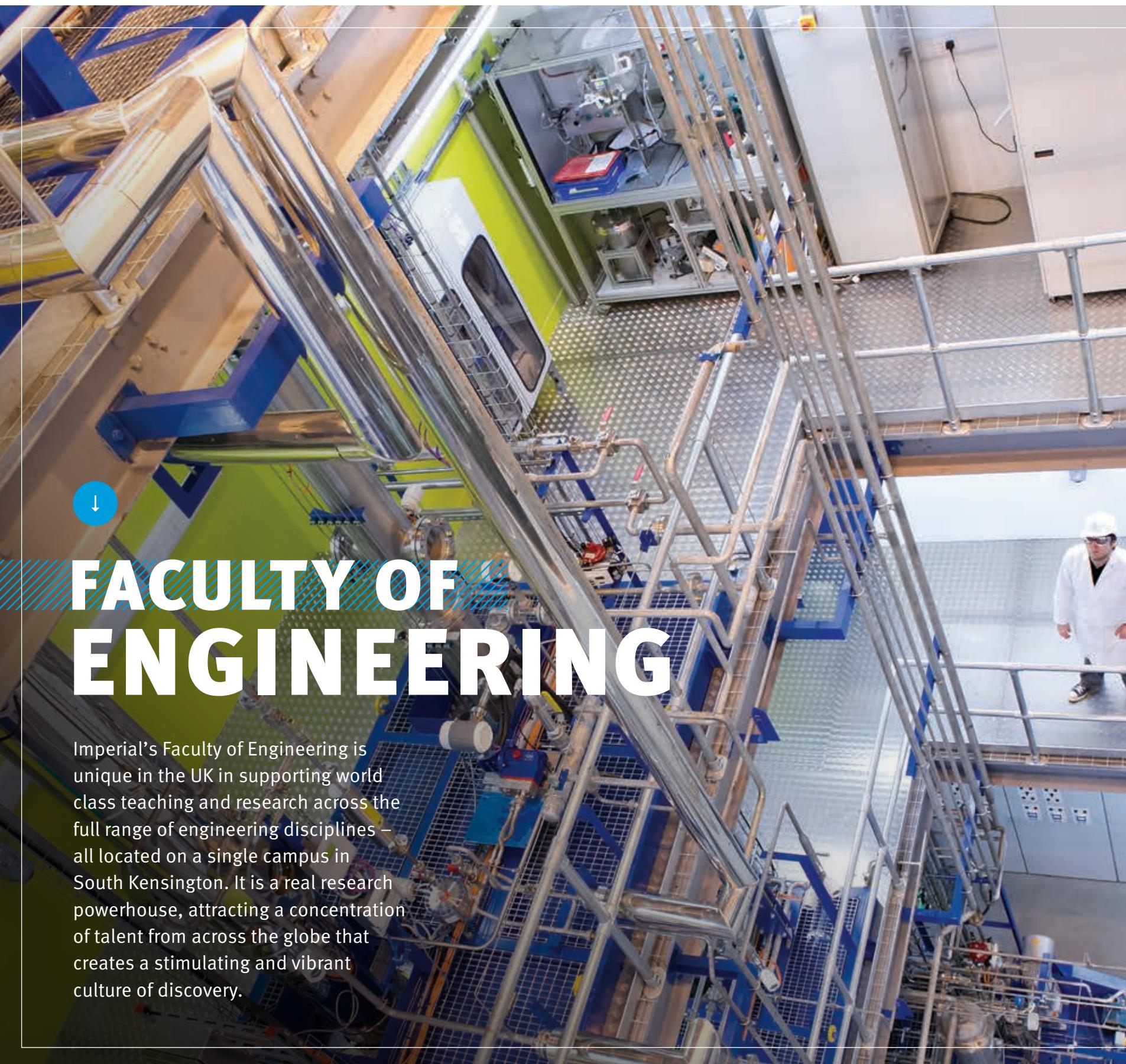
**Biotechnology and Biological Sciences Research Council DTP**  
[www.imperial.ac.uk/  
bbsrc-doctoral-training-partnership](http://www.imperial.ac.uk/bbsrc-doctoral-training-partnership)

**Medical Research Council DTP**  
[www.imperial.ac.uk/mrc-dtp-studentships](http://www.imperial.ac.uk/mrc-dtp-studentships)



# FACULTY OF ENGINEERING

Imperial's Faculty of Engineering is unique in the UK in supporting world class teaching and research across the full range of engineering disciplines – all located on a single campus in South Kensington. It is a real research powerhouse, attracting a concentration of talent from across the globe that creates a stimulating and vibrant culture of discovery.



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## KEY FACTS

**Dean**  
Professor Jeff Magee

**£ Research income**  
£107 million

**Number of staff**  
1,788

**Number of students**  
6,796

## SOME OF OUR PEOPLE...



Emeritus Professor John Burland, who helped stabilise the Leaning Tower of Pisa, was elected to the US National Academy of Engineering in 2016 – one of the highest professional distinctions accorded to an engineer.



Chemical Engineering PhD student Florence Gschwend won £10,000 of funding in the 2016 Althea-Imperial Programme for her process for converting metal-contaminated waste wood into useful materials.



Dr Queenie Hoi Shan Chan (PhD Astrobiology 2012, Department of Earth Science and Engineering) is a postdoctoral research scientist at NASA Johnson Space Center, studying organic materials in extraterrestrial objects.

# Aeronautics

## ABOUT THE DEPARTMENT

Professional quality experimental facilities, close contact with industry and talented, enthusiastic staff all contribute to the outstanding reputation of Imperial's Department of Aeronautics.

The Department is organised into two sections – Aerodynamics and Aerostructures – with research expertise spanning three key fields: field mechanics; aerospace materials and structures; and computational methods and mathematical modelling. Our research facilities support computational and experimental projects in fluid mechanics, structural analysis, composites, optimisation and control and aircraft design. Our experimental research is supported by well appointed laboratories and wind tunnels, with some of the equipment being unique in the UK.

**2nd**  
in the UK based on proportion  
of world leading research  
Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Master's courses

aero.msc-admissions@imperial.ac.uk

### Research programmes

Professor Ferri Aliabadi  
via: lisa.kelly@imperial.ac.uk

### CDT in Fluid Dynamics across Scales

fluids@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/aeronautics](http://www.imperial.ac.uk/study/pg/aeronautics)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 Minimum 2:1, preferably first class (1st) Honours degree, in an aerospace- or mechanical engineering-related degree with some experience of fluid and structural dynamics
- 2 2:1, preferably in engineering, physics, mathematics or computer science
- 3 2:1 in engineering (aeronautical or mechanical), materials science, physics or chemistry
- 4 A first class (1st) Honours degree in an engineering, physical sciences, applied mathematics or a related subject

### RESEARCH PROGRAMMES

- 5 Applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying
- 6 See the Fluid Dynamics across Scales CDT website for details: [www.imperial.ac.uk/fluids-cdt/admissions](http://www.imperial.ac.uk/fluids-cdt/admissions)

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

**International qualifications**  
We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Mechanical testing of a carbon-fibre composite aircraft fuselage panel.

	MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc	Advanced Aeronautical Engineering	1Y FT	1	✓	Home/EU: £12,000 FT, £6,000 PT Overseas: £29,000 FT, £14,500 PT	South Kensington
MSc	Advanced Computational Methods for Aeronautics, Flow Management and Fluid-Structure Interaction	1Y FT / 2Y PT	2	✓		South Kensington
MSc	Composites: the Science, Technology and Engineering Application of Advanced Composites	1Y FT / 2Y PT	3	✓		South Kensington
MRes	Fluid Dynamics across Scales	1Y FT	4	✓		South Kensington

### RESEARCH PROGRAMMES

PhD	Aeronautics research	2–4Y FT / 4–6Y PT	5	✓	Home/EU: £4,187 <sup>†</sup> FT Overseas: £22,500 FT	South Kensington
MRes + PhD	Fluid Dynamics across Scales (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	6	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/fluids-cdt">www.imperial.ac.uk/fluids-cdt</a>	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

# Bioengineering

## ABOUT THE DEPARTMENT

Imperial leads the bioengineering agenda both nationally and internationally, advancing the frontiers of our knowledge in the discipline. Research covers the breadth of bioengineering, from synthetic biology to regenerative medicine and neural engineering. In the REF 2014, 95 per cent of the Department's returned research was judged either 'world leading' or 'internationally excellent'. The Department has state-of-the-art laboratories, including wet and dry labs, extensive computing facilities and access to clinical facilities at our medical campuses. Our staff come from diverse academic disciplines, including all main branches of engineering, physical sciences, life sciences and medicine. The rich collaborative environment ensures our research benefits from both engineering rigour and clinical relevance.

3rd

in the UK in general engineering based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Master's courses

[be.mscadmissions@imperial.ac.uk](mailto:be.mscadmissions@imperial.ac.uk)

### Research programmes

[be.phdadmissions@imperial.ac.uk](mailto:be.phdadmissions@imperial.ac.uk)

### CDT in Neurotechnology for Life and Health

Dr Kate Hobson  
[k.hobson@imperial.ac.uk](mailto:k.hobson@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/bioengineering](http://www.imperial.ac.uk/study/pg/bioengineering)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

Applicants must gain support from a supervisor before applying for the following:

- MRes Bioengineering
- MRes Neurotechnology
- MD(Res) Bioengineering research
- PhD Bioengineering research

### MASTER'S COURSES

- 1 2:1 in an engineering, physical science, mathematical or life/biomedical sciences-based subject
- 2 2:1 in an engineering, physical science or mathematical subject
- 3 2:1 in an engineering or physical science subject. Students with a biological or medical sciences background may be considered if they can demonstrate substantial quantitative skills

### RESEARCH PROGRAMMES

- 4 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 5 2:1 in a physical science or engineering subject. Students with a biological or medical sciences background may be considered if they can demonstrate substantial quantitative skills

### English language requirement

You must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

Dr Faisal's (pictured right) research combines cross-disciplinary computational and experimental approaches to investigate how the brain and its neural circuits are designed to learn and control goal-directed movements.



	MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18*	CAMPUS
MRes	Bioengineering	1Y FT	1	✓	Home/EU: £12,000 FT Overseas: £29,000 FT	South Kensington
MSc	Biomedical Engineering	1Y FT	2	✗		South Kensington
MSc	Human and Biological Robotics	1Y FT	2	✗		South Kensington
MRes	Medical Device Design and Entrepreneurship	1Y FT	1	✓		South Kensington
MRes	Neurotechnology	1Y FT	3	✓		South Kensington

### RESEARCH PROGRAMMES

MD(Res)	Bioengineering research	2–4Y FT / 4–6Y PT	4	✓	Home/EU: £4,187 <sup>†</sup> FT Overseas: £22,500 FT	South Kensington
PhD	Bioengineering research	2–4Y FT / 4–6Y PT	4	✓		South Kensington
MRes + PhD	Neurotechnology (delivered by our CDT in Neurotechnology for Life and Health, see page 63)	1Y + 3Y FT	5	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/neurotechnology/cdt">www.imperial.ac.uk/neurotechnology/cdt</a>	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

# Chemical Engineering

## ABOUT THE DEPARTMENT

Imperial's Department of Chemical Engineering is one of the world's leading research schools in the field. Research carried out within the Department covers a very broad spectrum, ranging from technological studies of the behaviour of processes and equipment to techniques for process planning, design and control. This is supported by a wide range of specialist research facilities, including a carbon capture pilot plant – the most sophisticated facility of its kind in the world.

The Department has strong links with industrial and commercial organisations, including BP, Shell, ICI, P&G, GlaxoSmithKline and Unilever, which provide financial support for bursaries and real world research projects.

**2nd**  
in the UK based on proportion  
of world leading research  
Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Advanced Chemical Engineering

chemeng-msc-admissions@imperial.ac.uk

### Process Automation

msc-paic-admissions@imperial.ac.uk

### Research programmes

chemeng-phd-admissions@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/chemical-engineering](http://www.imperial.ac.uk/study/pg/chemical-engineering)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in a physical science, engineering, mathematical or life/biomedical sciences-based subject
- 2 2:1, or equivalent, in an engineering or physical sciences discipline which includes some mathematics. A-level mathematics at grade A or equivalent
- 3 2:1 in science or engineering and at least one year of current industrial experience

### RESEARCH PROGRAMMES

- 4 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Outstanding applicants will be considered for the **Chemical Engineering PhD Scholarships scheme**. Please contact the Department for details

### English language requirement

You must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Clementine Chambon is an Imperial College PhD Scholarship recipient in the Department of Chemical Engineering.

MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc Advanced Chemical Engineering	1Y FT	1	✓	Home/EU: £12,000 FT Overseas: £29,000 FT	South Kensington
MSc Advanced Chemical Engineering with Biotechnology	1Y FT	1	✓		South Kensington
MSc Advanced Chemical Engineering with Process Systems Engineering	1Y FT	1	✓		South Kensington
MSc Advanced Chemical Engineering with Structured Product Engineering	1Y FT	1	✓		South Kensington
MRes Molecular Science and Engineering (delivered by the Institute for Molecular Science and Engineering, see page 60)	1Y FT	2	✓	TBC – will be published on our website once confirmed	South Kensington
PG Cert Process Automation, Instrumentation and Control <sup>b</sup>	6 months–2Y PT	3	X	See website for fee details	South Kensington
PG Dip Process Automation, Instrumentation and Control <sup>b</sup>	1–3Y PT	3	X		South Kensington
MSc Process Automation, Instrumentation and Control <sup>b</sup>	2–5Y PT	3	✓		South Kensington

### RESEARCH PROGRAMMES

PhD Carbonates and Carbon research	2–4Y FT / 4–6Y PT	4	✓	Home/EU: £11,500 FT Overseas: £28,000 FT	South Kensington
PhD Chemical Engineering research	2–4Y FT / 4–6Y PT	4	✓	Home/EU: £4,187 <sup>c</sup> FT Overseas: £22,500 FT	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

<sup>b</sup> This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

<sup>c</sup> Applicants should apply to the PG Certificate in the first instance. On successful completion, they have the option to progress to the PG Diploma and then the MSc. This is the only entry point to these higher courses.

## DEPARTMENT OF

# Civil and Environmental Engineering

**ABOUT THE DEPARTMENT**

We are the largest and most highly rated civil engineering department in the UK, educating some of the world's most capable students to the highest possible level and conducting world leading research. Our work involves lab, field and computer-based work in the core areas of environmental and water resources engineering, fluid mechanics, geotechnics, structures, systems and transport.

We aim to develop the understanding, tools and people needed to create and maintain sustainable natural and built environments, working on most of the major challenges currently facing the world, including resilience of communities to natural and man-made extreme events, sustainable urbanisation, providing water for all, climate change mitigation/adaptation, diminishing natural resources, renewable energy, low carbon economy and extending the life of our infrastructure.

1st

(joint) in the UK based on proportion of world leading research

Research Excellence Framework (REF) 2014

**FIND OUT MORE****Master's courses**

cvpg@imperial.ac.uk

**Research programmes**

civil.pgr@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/civil-engineering](http://www.imperial.ac.uk/study/pg/civil-engineering)

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 Minimum of 2:1 in a relevant subject (such as civil engineering, other branches of engineering, natural sciences, earth sciences and other numerate disciplines). Applicants with relevant industrial/professional experience may also be considered. A-Level Mathematics at minimum grade B or equivalent also required
- 2 Normally a minimum of 2:1 in an engineering- or science-based discipline, plus A-Level mathematics at grade A or equivalent

**RESEARCH PROGRAMMES**

- 3 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying
- 4 See the CDT website for details: [www.imperial.ac.uk/sustainable-civil-engineering](http://www.imperial.ac.uk/sustainable-civil-engineering)
- 5 See [www.stream-idc.net/studying.php](http://www.stream-idc.net/studying.php)

**English language requirement**

You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
<b>Advanced Structural Engineering</b>					
MSc Concrete Structures	1Y FT / 2Y PT / 3Y PT	1	X	Home/EU: £12,000 FT, £6,000 2Y PT, £4,000 3Y PT Overseas: £29,000 FT, £14,500 2Y PT, £9,667 3Y PT	South Kensington
MSc Earthquake Engineering	1Y FT / 2Y PT / 3Y PT	1	X		South Kensington
MSc General Structural Engineering	1Y FT / 2Y PT / 3Y PT	1	X		South Kensington
MSc Structural Steel Design	1Y FT / 2Y PT / 3Y PT	1	X		South Kensington
<b>Environmental Engineering</b>					
MSc Environmental Engineering	1Y FT / 2Y PT	1	X	Home/EU: £12,000 FT, £6,000 PT Overseas: £29,000 FT, £14,500 PT	South Kensington
MSc Environmental Engineering and Business Management/ Sustainable Development	1Y FT / 2Y PT	1	X		South Kensington
MSc Hydrology and Business Management/ Sustainable Development/Water Resources Management	1Y FT / 2Y PT	1	X		South Kensington
<b>Fluid Mechanics</b>					
MSc Engineering Fluid Mechanics for the Offshore, Coastal and Built Environments	1Y FT / 2Y PT	2	X	Home/EU: £12,000 FT, £6,000 PT Overseas: £29,000 FT, £14,500 PT	South Kensington
<b>Geotechnics</b>					
MSc Soil Mechanics	1Y FT / 2Y PT	1	X	Home/EU: £12,000 FT, £6,000 PT Overseas: £29,000 FT, £14,500 PT	South Kensington
MSc Soil Mechanics and Business Management/ Engineering Seismology/ Environmental Geotechnics/ Sustainable Development	1Y FT / 2Y PT	1	X		South Kensington
<b>Transport</b>					
MSc Transport <sup>t</sup>	1Y FT / 2Y PT / 3Y PT	1	X	Home/EU: £12,000 FT, £6,000 2Y PT, £4,000 3Y PT Overseas: £29,000 FT, £14,500 2Y PT, £9,667 3Y PT	South Kensington
MSc Transport and Business Management/ Sustainable Development <sup>t</sup>	1Y FT / 2Y PT / 3Y PT	1	X		South Kensington
<b>RESEARCH PROGRAMMES</b>					
PhD Civil Engineering research	2–4Y FT / 4–6Y PT	3	✓	Home/EU: £4,187 <sup>s</sup> FT; Overseas: £22,500 FT	South Kensington
PhD Sustainable Civil Engineering (delivered by our CDT of the same name, see page 63)	4Y FT	4	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/sustainable-civil-engineering">www.imperial.ac.uk/sustainable-civil-engineering</a>	South Kensington
EngD Water Engineering research (delivered in the IDC in Engineering for the Water Sector <sup>§</sup> )	4Y FT	5	✓	See IDC website for fees and funding: <a href="http://www.stream-idc.net">www.stream-idc.net</a>	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

‡ Joint course with University College London (UCL).

§ Industrial Doctorate Centre led by Cranfield University, in partnership with Imperial College London, University of Exeter, University of Sheffield and Newcastle University.

# Computing

## ABOUT THE DEPARTMENT

Imperial's Department of Computing is one of the UK's largest computing departments in terms of teaching and research staff. The Department is a world leader in academic research, with over 30 research groups spanning logic and artificial intelligence, distributed software engineering, quantitative analysis and decision science, programming languages and systems and visual information processing. We're also involved in two cross-faculty research groups: Machine Learning and Security.

Our teaching and research expertise is underpinned by state-of-the-art facilities and a dedicated technical support team for the Department to make sure you get the most out of the technology available to you.

**2nd**

(joint) in the UK based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Master's courses

doc-mscadmissions@imperial.ac.uk

### Research programmes

phd-admissions@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/computing](http://www.imperial.ac.uk/study/pg/computing)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 with a substantial computing component
- 2 2:1 in any discipline
- 3 2:1 in a science or engineering discipline, including computing

Applicants must provide **Graduate Record Examination (GRE) scores for Quantitative Reasoning and Verbal Reasoning**. As well as entering the scores on the application form, applicants must ask the GRE organisation to send validating certificates to the Department. Only the first scores submitted will be considered. While there is no minimum requirement for GRE scores, a strong application would include scores higher than 159 for Quantitative Reasoning and higher than 145 for Verbal Reasoning. See [www.ets.org/gre](http://www.ets.org/gre)

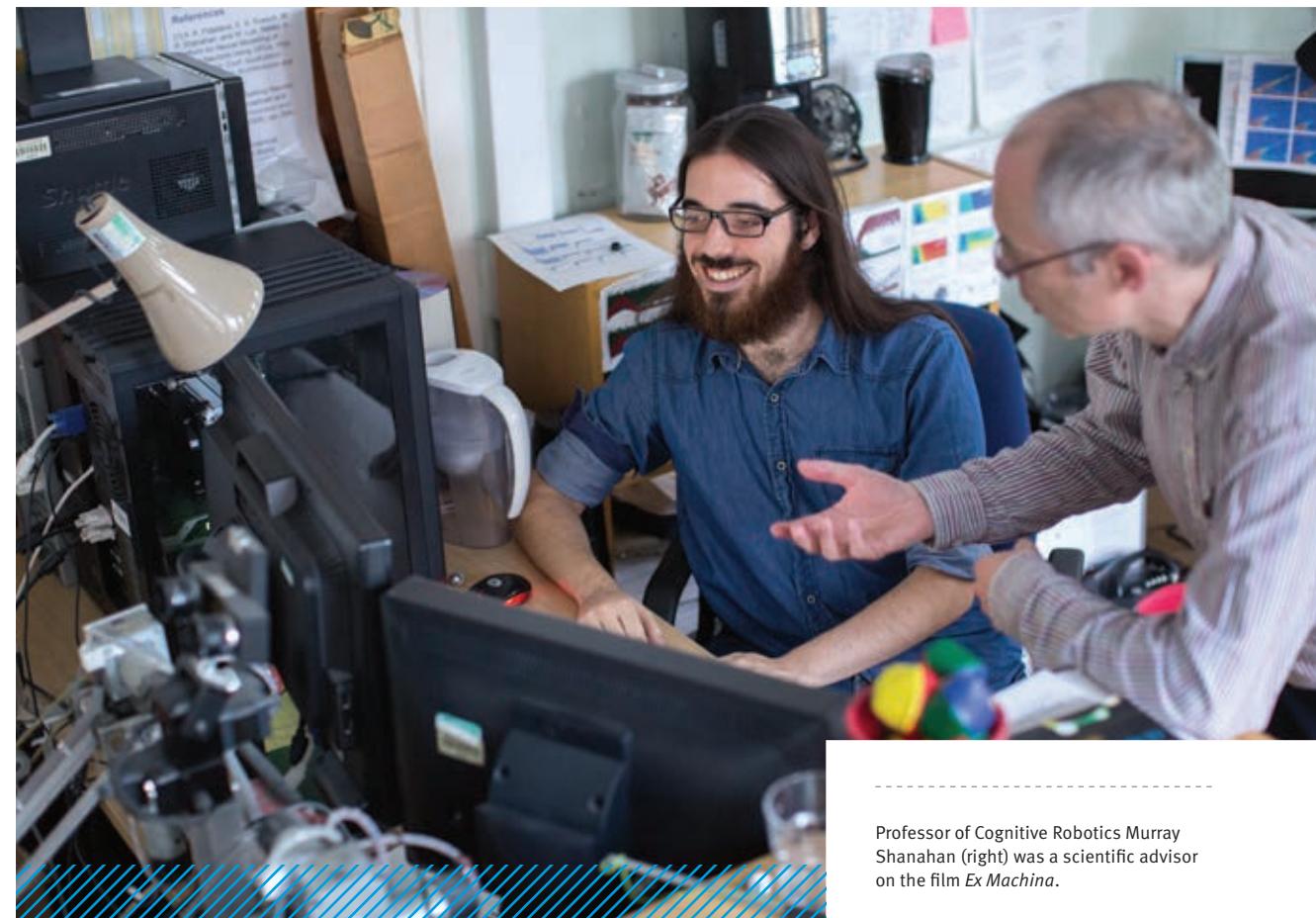
### RESEARCH PROGRAMMES

- 4 Applicants need to have achieved a first class (1st) Honours in a 4-year MEng undergraduate degree, or a distinction at Master's level

**English language requirement**  
You must achieve the **standard College requirement** (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Professor of Cognitive Robotics Murray Shanahan (right) was a scientific advisor on the film *Ex Machina*.

MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MRes	Advanced Computing	1Y FT	1	✓	Home/EU: £13,500 FT Overseas: £29,500 FT	South Kensington
MSc	Advanced Computing	1Y FT	1	X		South Kensington
MSc	Computing Science	1Y FT	2	X		South Kensington
MSc	Computing (Artificial Intelligence/ Computational Management/ Machine Learning/Secure Software Systems/Software Engineering/ Visual Computing and Robotics)	1Y FT	3	X		South Kensington

### RESEARCH PROGRAMMES

PhD	Computing research	2–4Y FT / 4–6Y PT	4	✓	Home/EU: £4,187 <sup>†</sup> FT Overseas: £22,500 FT	South Kensington
MRes + PhD	Advanced Computing: High Performance Embedded and Distributed Systems (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	4	✓	See CDT website for fees and funding: <a href="http://wp.doc.ic.ac.uk/hipeds">wp.doc.ic.ac.uk/hipeds</a>	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

# Design Engineering

## ABOUT THE SCHOOL

The Dyson School of Design Engineering combines fantastic facilities with the creation of a new design community that draws together existing design engineering research and teaching activities from across Imperial.

The School collaborates with and receives sponsorship from major organisations including Laing O'Rourke, Rolls-Royce, NASA, CERN, the NHS and the James Dyson Foundation, whose generous £12 million donation helped found the School. Both of our Master's degrees are delivered with the neighbouring Royal College of Art, which has its own specialist facilities and a vibrant community of artists with talents ranging from fine art to fashion, design to goldsmithing.

*"We want to create engineers who are bold and commercially astute. They will use their skills, nurtured in the Dyson School, to develop future technology that will catalyse Britain's economic growth."*

Sir James Dyson

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in any subject. However, you must show aptitude or great potential in design or technology-led innovation  
In exceptional circumstances applicants without this degree qualification but with excellent professional experience or outstanding creative or technical abilities, for example, will be considered.

### RESEARCH PROGRAMME

- 2 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying

### English language requirement

- Global Innovation Design – you must satisfy the **higher** College requirement.
- Innovation Design Engineering – you must satisfy the **standard** College requirement.

See page 125 for more information.

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

## FIND OUT MORE

### All programmes

[design.engineering@imperial.ac.uk](mailto:design.engineering@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/design-engineering](http://www.imperial.ac.uk/study/pg/design-engineering)



MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MA / MSc Global Innovation Design <sup>†</sup>	2Y FT	1	X	Home/EU and Overseas: Fees set and charged by the RCA	South Kensington
MA / MSc Innovation Design Engineering <sup>†</sup>	21 months FT	1	X	Home/EU and Overseas: Fees set and charged by the RCA	South Kensington

### RESEARCH PROGRAMME

PhD	Design Engineering research	2–4Y FT / 4–6Y PT	2	✓	Home/EU: £4,187 <sup>†</sup> FT Overseas: £22,500 FT	South Kensington
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Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

‡ Double degree course with the Royal College of Art (RCA) – all applications must be made direct to the RCA.

## DEPARTMENT OF

# Earth Science and Engineering

**ABOUT THE DEPARTMENT**

The Department of Earth Science and Engineering straddles the interface between pure science and engineering. Our research is focused on understanding the fundamental processes that occur on the Earth's surface down to the planet's deep interior. Our work contributes to an understanding of climate change at various temporal and spatial scales; we also aim to meet the challenge of reducing the environmental impact of society's consumption of natural resources.

Our work spans three themes: Earth and planetary science; petroleum science and engineering; and mineral and environmental engineering. We're also involved in a number of cross-disciplinary and cross-departmental research centres such as the Grantham Institute and Energy Futures Lab (see page 58–61).

**2nd**  
in the UK based on proportion  
of world leading research

Research Excellence Framework (REF) 2014

**FIND OUT MORE****All programmes**

Samantha Symmonds, PhD Administrator  
sam.symmonds@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/earth-science](http://www.imperial.ac.uk/study/pg/earth-science)

**ENTRY  
REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 2:1 in engineering, the physical sciences or economics, with a substantial mathematics element. Appropriate experience, while not essential, would be an advantage
- 2 First class (1st) Honours degree in a science or engineering subject. Students with other qualifications but a minimum of three years' relevant industrial experience are also encouraged to apply
- 3 2:1 in an earth science-based subject. Students with other closely related earth/environmental science degrees will be considered. Professionals with different qualifications but relevant industrial experience are also encouraged to apply

**RESEARCH PROGRAMMES**

- 4 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying

**English language requirement**

You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Professor Ann Muggeridge (left), Total Chair in Petroleum Engineering, with PhD student Rebecca Hihinashvili in the Rock Library in the Royal School of Mines. Alan Howard Scholarship recipient Rebecca's research focused on the structural characterisation of porous media with applications to the porous electrodes in fuel cells.

<b>MASTER'S COURSES</b>		<b>DURATION</b>	<b>ENTRY REQ. (see left)</b>	<b>ATAS</b>	<b>FEE 2017–18*</b> <b>(per year)</b>	<b>CAMPUS</b>
MSc	Metals and Energy Finance	1Y FT	1	X	Home/EU: £20,000 FT Overseas: £33,000 FT	South Kensington
MSc	Petroleum Engineering	1Y FT	2	✓	Home/EU: £15,500 FT Overseas: £33,000 FT	South Kensington
MSc	Petroleum Geoscience	1Y FT	3	X	Home/EU: £15,500 FT Overseas: £33,000 FT	South Kensington

**RESEARCH PROGRAMMES**

PhD	Earth Science and Engineering research	2–4Y FT / 4–6Y PT	4	X	Home/EU: £4,187 <sup>†</sup> FT Overseas: £22,500 FT	South Kensington
PhD	Petroleum Engineering research	2–4Y FT / 4–6Y PT	4	✓	Home/EU: £11,500 FT Overseas: £28,000 FT	South Kensington

We also have PhD opportunities available in the following Centres for Doctoral Training, of which Imperial is a partner institution: NERC CDT in Oil & Gas ([www.nerc-cdt-oil-and-gas.ac.uk](http://www.nerc-cdt-oil-and-gas.ac.uk)); EPSRC CDT in Fuel Cells and Their Fuels ([www.birmingham.ac.uk/research/activity/chemical-engineering/energy-chemical/fuel-cells/CDT/index.aspx](http://www.birmingham.ac.uk/research/activity/chemical-engineering/energy-chemical/fuel-cells/CDT/index.aspx)). For details and application procedures please see the CDT websites.

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

## DEPARTMENT OF

# Electrical and Electronic Engineering

**ABOUT THE DEPARTMENT**

The Department of Electrical and Electronic Engineering is an internationally leading research centre. Our community has a strong commitment to conducting innovative research, and we are renowned for our research excellence. We were ranked top for research in electrical and electronic engineering in the REF 2014, where 97 per cent of our research was rated as either ‘world leading’ or ‘internationally excellent’.

Our research is focused around seven themes: high performance embedded systems; biomedical research; defence and security; power; intelligent and autonomous systems; MEMS, sensors and devices; and big data.

The Department’s work is internationally renowned and attracts millions of pounds in grants and contracts each year. Our research benefits industry, government and regulatory bodies, health services and the financial sector, and leads to solutions to industrial challenges, patenting and licensing of intellectual property and the formation of spin-out companies.

1st

in the UK based on proportion of world leading research

Research Excellence Framework (REF) 2014

**FIND OUT MORE****All programmes**

admit.eee@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/electrical-engineering](http://www.imperial.ac.uk/study/pg/electrical-engineering)

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 A high first class (1st) Honours degree (75% or over) in electrical engineering or a related subject

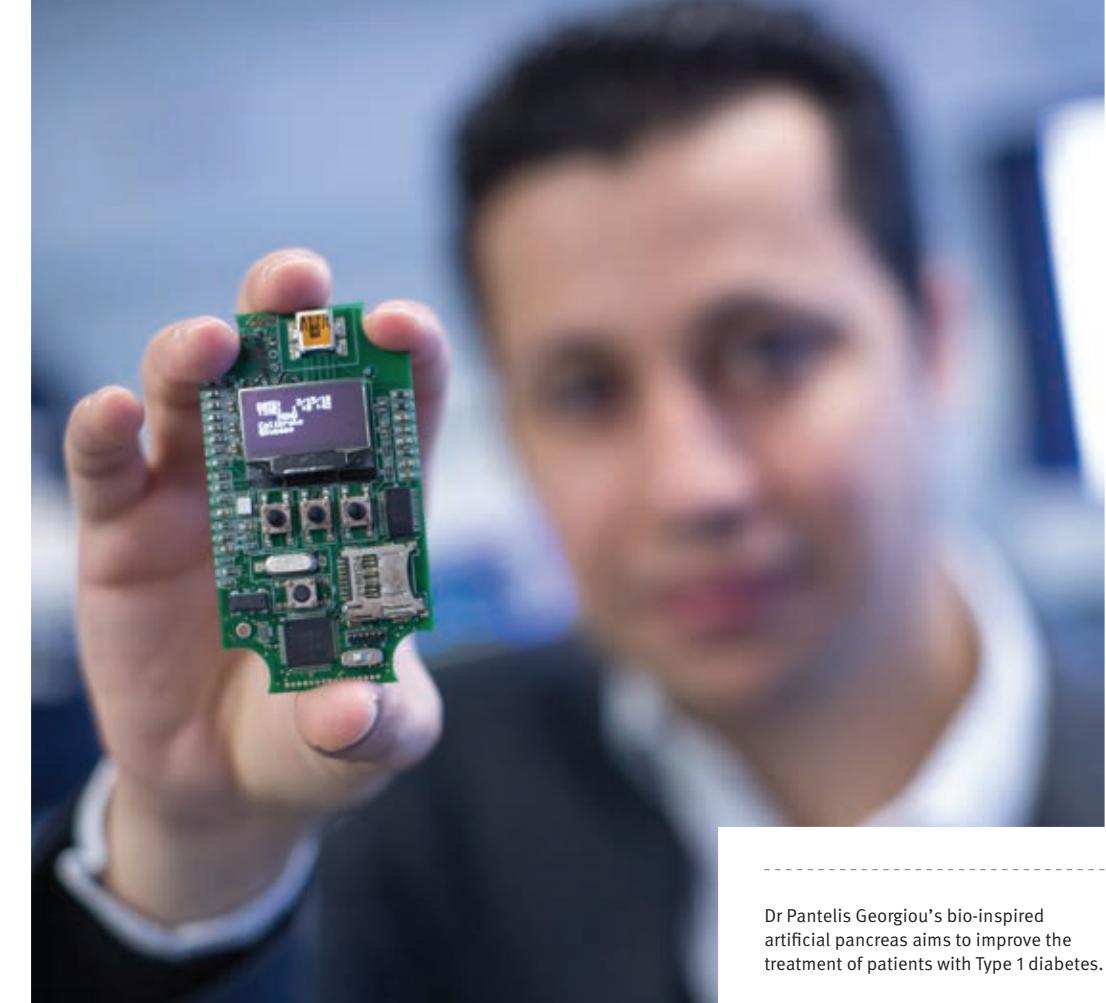
**RESEARCH PROGRAMMES**

- 2 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 3 See the Department's website for details: [www.imperial.ac.uk/electricalengineering](http://www.imperial.ac.uk/electricalengineering)

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Dr Pantelis Georgiou's bio-inspired artificial pancreas aims to improve the treatment of patients with Type 1 diabetes.

	<b>MASTER'S COURSES</b>	<b>DURATION</b>	<b>ENTRY REQ. (see left)</b>	<b>ATAS</b>	<b>FEE 2017–18*</b> (per year)	<b>CAMPUS</b>
MSc	Analogue and Digital Integrated Circuit Design	1Y FT	1	X	Home/EU: £12,000 FT Overseas: £29,000 FT	South Kensington
MSc	Communications and Signal Processing	1Y FT	1	X		South Kensington
MSc	Control Systems	1Y FT	1	X		South Kensington
MSc	Future Power Networks	1Y FT	1	X		South Kensington

**RESEARCH PROGRAMMES**

PhD	Electrical Engineering research	2–4Y FT / 4–6Y PT	2	✓	Home/EU: £4,187 FT Overseas: £22,500 FT	South Kensington
PhD	Future Power Networks and Smart Grids <sup>†</sup> (delivered by the CDT of the same name, joint with University of Strathclyde)	4Y FT	3	X	Contact the University of Strathclyde: eee-cdtadmissions@strath.ac.uk	Strathclyde/ South Kensington
PhD	High Performance Embedded and Distributed Systems (delivered by our CDT of the same name, see page 63)	4Y FT	2	X	See CDT website for fees and funding: wp.doc.ic.ac.uk/ hipeds	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

‡ Apply through the University of Strathclyde ([eee-cdtadmissions@strath.ac.uk](mailto:eee-cdtadmissions@strath.ac.uk)).

# Materials

## ABOUT THE DEPARTMENT

Imperial's Department of Materials is the oldest and largest of its kind in the UK. Our teaching and research methods integrate fabrication, processing, modelling and characterisation of materials, and our approach is multidisciplinary and broad. This is illustrated by our multitude of collaborations across a diverse range of industries, academic institutions and departments at Imperial – in particular Bioengineering, Physics, Chemistry and Mechanical Engineering.

Our postgraduate students and staff, who have joined the Department from over 40 countries, have backgrounds in materials science, chemistry, physics, mechanical engineering, chemical engineering and electrical engineering. We maintain a high level of investment and maintenance in our state-of-the-art facilities to ensure you are able to practise the most advanced techniques in the discipline.

**2nd**  
in the UK based on proportion  
of world leading and internationally  
excellent research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### All programmes

mtpgadmit@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/materials](http://www.imperial.ac.uk/study/pg/materials)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in an engineering or science discipline (e.g. materials; mechanical, civil or chemical engineering; physics or chemistry)

### RESEARCH PROGRAMMES

- 2 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying
- 3 See the Advanced Characterisation of Materials CDT website for details: [www.cdt-acm.org/how-to-apply](http://www.cdt-acm.org/how-to-apply)
- 4 See the Nuclear Energy CDT website for details: [www.imperial.ac.uk/nuclear-cdt/programme](http://www.imperial.ac.uk/nuclear-cdt/programme)



Professor Julian Jones is a Chair in Biomaterials. His research focuses on biomaterials for regenerative medicine. See page 8 to read more about Julian's work.

	MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc	Advanced Materials Science and Engineering	1Y FT	1	✓	Home/EU: £12,000 FT Overseas: £29,000 FT	South Kensington
MSc	Advanced Nuclear Engineering	1Y FT	1	✓		South Kensington

### RESEARCH PROGRAMMES

PhD	Materials research	2–4Y FT / 4–6Y PT	2	✓	Home/EU: £4,187* FT Overseas: £22,500 FT	South Kensington
PhD	Advanced Characterisation of Materials (delivered by our joint EPSRC CDT with UCL of the same name, see page 63)	4Y FT	3	✓	See CDT website for fees and funding: <a href="http://www.cdt-acm.org">www.cdt-acm.org</a>	South Kensington
MSc + PhD	Nuclear Energy (delivered by our ICO CDT in Nuclear Energy, see page 63)	1Y + 3Y FT	4	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/nuclear-cdt">www.imperial.ac.uk/nuclear-cdt</a>	South Kensington

Y Years    FT Full-time study    PT Part-time study    ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

## DEPARTMENT OF

# Mechanical Engineering

**ABOUT THE DEPARTMENT**

Imperial's Department of Mechanical Engineering is one of the largest and most advanced of its kind in the world. It has extensive laboratory facilities and a long-standing international reputation for the quality of its research, which is organised into three divisions: applied mechanics; mechanics of materials; and thermofluids.

Creating work that's useful and has a practical application is our main aim, which is why we have forged close relationships with a range of industries – from those involved in the development of aircraft engines to human knee joints. It's this focus that keeps us motivated to produce new inventions.

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 A first class (1st) Honours degree in engineering or science
- 2 2:1 in engineering or physical sciences

**RESEARCH PROGRAMMES**

Please gain support from a supervisor before applying.

- 3 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 4 See the Non-Destructive Evaluation CDT website for details: [www.rcnde.ac.uk/how-to-apply](http://www.rcnde.ac.uk/how-to-apply)

2nd

*in the UK based on proportion of world leading research*

Research Excellence Framework (REF) 2014

**FIND OUT MORE****Sustainable Energy Futures**

[mscinsef@imperial.ac.uk](mailto:mscinsef@imperial.ac.uk)

**All other programmes**

Kate Lewis, Postgraduate Administrator  
[kate.lewis@imperial.ac.uk](mailto:kate.lewis@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/mechanical-engineering](http://www.imperial.ac.uk/study/pg/mechanical-engineering)

**English language requirement**  
 You must achieve the **higher** College requirement for the MSc Sustainable Energy Futures. For all other programmes you must achieve the **standard** College requirement (see page 125).

**International qualifications**  
 We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

Professor John Dear and his research group using the Department's tensile stress machine to measure the deformation and breaking points of materials.



MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18*	CAMPUS
MSc Advanced Mechanical Engineering	1Y FT / 2Y PT / 3Y PT	1	✓	Home/EU: £12,000 FT, £6,000 2Y PT, £4,000 3Y PT Overseas: £29,000 FT, £14,500 2Y PT, £9,667 3Y PT	South Kensington
MSc Sustainable Energy Futures (delivered by Energy Futures Lab, see page 58)	1Y FT	2	✗	Home/EU: £12,000 FT Overseas: £29,000 FT	South Kensington
<b>RESEARCH PROGRAMMES</b>					
PhD Mechanical Engineering research	2–4Y FT / 4–6Y PT	3	✓	Home/EU: £4,187* FT Overseas: £22,500 FT	South Kensington
MD(Res) Mechanical Engineering research	2–4Y FT / 4–6Y PT	3	✓		South Kensington
EngD / PhD Non-Destructive Evaluation (delivered by our CDT in Quantitative Non-Destructive Evaluation, see page 63)	2–4Y FT	4	✓	See CDT website for fees and funding: <a href="http://www.rcnde.ac.uk/home-cdt">www.rcnde.ac.uk/home-cdt</a>	South Kensington

We also have PhD opportunities available in the EPSRC CDT in Diamond Science and Technology, of which Imperial is a partner institution. For details see: [www.2.warwick.ac.uk/fac/sci/dst](http://www.2.warwick.ac.uk/fac/sci/dst)

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

# FACULTY OF NATURAL SCIENCES



Four core scientific disciplines – chemistry, life sciences, mathematics and physics – form the backbone of the Faculty's teaching and research activities. Our research harnesses the breadth of our expertise to meet the changing needs of society, industry and healthcare, and to address the global challenges of climate change, energy, global health and security.



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## KEY FACTS

**Dean**  
Professor Tom Welton

**£ Research income**  
£75 million

**Number of staff**  
1,419

**Number of students**  
4,787

## SOME OF OUR PEOPLE...



Professor André Neves was recently awarded a New Horizons in Mathematics Prize for outstanding contributions to differential geometry, presented live on the National Geographic Channel.



PhD students Kerry O'Donnelly Weaver and Angela de Manzano have secured £100,000 of investor funding for their device FungiAlert, which acts as an early detection system for plant pathogens.



Alumnus Dr Matt Taylor (PhD Space Plasma Physics 2000) is a Project Scientist on the European Space Agency's Rosetta mission, which saw the comet lander Philae touch down on the comet 67P/Churyumov-Gerasimenko in November 2014.

## DEPARTMENT OF

# Chemistry

**ABOUT THE DEPARTMENT**

The Department of Chemistry has a thriving research community with research spanning six themes: synthesis and catalysis; chemical biology and healthcare; environmental and green chemistry; energy; imaging, sensing and analytical chemistry; and materials and molecular design. Our skills are also central to several multidisciplinary molecular science research centres: the Centre for Plastic Electronics, the Institute of Chemical Biology, the Institute for Molecular Science and Engineering and the EPSRC UK National Service for Computational Chemistry Software.

We have strong links with industry, reflected in generous research and teaching funding and extensive facilities, including well-equipped research laboratories and state-of-the-art chemical instrumentation.

From early 2018, the Department will occupy the new Molecular Sciences Research Hub on the College's White City Campus (see page 29).

96%

*of research classed as world leading or internationally excellent*  
Research Excellence Framework (REF) 2014

**FIND OUT MORE****MRes courses**

Michael Ray, Programme Coordinator  
[michael.ray@imperial.ac.uk](mailto:michael.ray@imperial.ac.uk)

**Research programmes**

Doris Pappoe, Postgraduate Administrator  
[d.pappoe@imperial.ac.uk](mailto:d.pappoe@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/chemistry](http://www.imperial.ac.uk/study/pg/chemistry)

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MRes COURSES**

- 1 2:1 in a science, technology, engineering or medicine subject
- 2 2:1 in chemistry, engineering or a related subject. A modest level of background chemistry or engineering knowledge is assumed
- 3 2:1 in any subject with more than 50% physical science content (e.g. chemistry, physics, mathematics, biophysics, biochemistry, bioengineering)
- 4 2:1 in a relevant subject, particularly in subjects such as chemistry, pharmacy, physics, biochemistry and medicine
- 5 2:1 in a relevant subject, particularly in subjects such as chemistry, physics, mathematics, materials, biochemistry and engineering

**RESEARCH PROGRAMMES**

- 6 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying
- 7 Check the website of your chosen CDT for details (see pages 62–63)

**English language requirement**

You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



The Department's Kucernak Research Group specialises in developing novel electrochemical diagnostic techniques for clean energy devices such as low temperature fuel cells, supercapacitors and redox flow batteries.

MRes COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MRes Bioimaging Sciences	1Y FT	1	✓	Home/EU: £10,900 FT, £5,450 PT Overseas: £30,600 FT, £15,300 PT	South Kensington/ White City
MRes Catalysis: Chemistry and Engineering	1Y FT	2	✓		South Kensington/ White City
MRes Chemical Biology: Multidisciplinary Physical Scientists for Next Generation Biological, Biomedical and Pharmaceutical Research and Development	1Y FT	3	✓		South Kensington/ White City
MRes Drug Discovery and Development: Multidisciplinary Science for Next Generation Therapeutics	1Y FT	4	✓		South Kensington/ White City
MRes Green Chemistry, Energy and the Environment	1Y FT	4	✓		South Kensington/ White City
MRes Nanomaterials	1Y FT	5	✓		South Kensington/ White City
MRes Plant Chemical Biology: Multidisciplinary Research for Next Generation Agri-Sciences	1Y FT / 2Y PT	3	✓		South Kensington/ White City
MRes Plastic Electronic Materials (hosted by the Department of Physics)	1Y FT	4	✓	Home/EU: £14,500 FT Overseas: £30,100 FT	South Kensington/ White City

**RESEARCH PROGRAMMES**

PhD Chemistry research	2–4Y FT / 4–6Y PT	6	✓	Home/EU: £4,187 FT Overseas: £28,300 FT	South Kensington/ White City
MRes + PhD Chemical Biology (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.icb-cdt.co.uk">www.icb-cdt.co.uk</a>	South Kensington/ White City
MRes + PhD Plastic Electronic Materials (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/plastic-electronics">www.imperial.ac.uk/plastic-electronics</a>	South Kensington/ White City
MSc + PhD Theory and Simulation of Materials (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/theory-and-simulation-of-materials">www.imperial.ac.uk/theory-and-simulation-of-materials</a>	South Kensington/ White City

We also have PhD opportunities available in the EPSRC CDT in Medical Imaging (joint with Kings College London). For details see: [www.imagingcdt.com](http://www.imagingcdt.com)

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

CENTRE FOR

# Environmental Policy

## ABOUT THE CENTRE

The Centre for Environmental Policy provides a unique interface between science and engineering, and the economic, legal and policy context in which they are developed and applied. Focusing on environmental and sustainability issues, including energy, pollution, resource management, food, water and health security, and poverty reduction, we produce the highest quality interdisciplinary research, teaching and advice on environmental matters.

As well as our world leading MSc courses, we offer extensive PhD training opportunities. Topics for doctoral study are interdisciplinary, with a focus on current and foreseeable environmental issues in the UK and around the world.

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in any subject including science, engineering or social sciences
- 2 2:1 in an appropriate subject

### RESEARCH PROGRAMME

- 3 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

**International qualifications**  
We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

## FIND OUT MORE

### All programmes

enquiries.env@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/environmental-policy](http://www.imperial.ac.uk/study/pg/environmental-policy)



Research student Emilie Beauchamp works within the Centre's Conservation Science Group. Her research focuses on leveraging sustainable natural resource management to alleviate poverty and build local governance in poor and forest-dependent communities.

MASTER'S COURSES	DURATION	ENTRY REQ. (see above)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc Environmental Technology	1Y FT / 2Y FT with industrial placement	1	X	Home/EU: £11,000 1Y FT, £5,500 2Y FT Overseas: £26,000 1Y FT, £13,000 2Y FT	South Kensington
MSc Sustainable Retirement Investment and Management	1Y FT / 2Y PT	2	X	Home/EU and Overseas: £15,000 FT, £7,500 PT	South Kensington
PhD Environmental research	2–4Y FT / 4–6Y PT	3	✓	Home/EU: £5,100 FT Overseas: £22,300 FT	South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

## DEPARTMENT OF

# Life Sciences

**ABOUT THE DEPARTMENT**

Imperial's Department of Life Sciences comprises one of the largest life sciences groups in Europe. Our outstanding reputation for research – spanning atoms to the biosphere – is underpinned by well-equipped facilities to support postgraduate research and teaching. This includes some of the most modern electron microscopes, tissue culture suites, a protein production and analysis facility, sophisticated controlled environment facilities and extensive field sites.

**1st**  
of UK multi-faculty universities  
based on research intensity  
Research Excellence Framework (REF) 2014

**FIND OUT MORE**

**Bioinformatics and Theoretical Systems Biology; Biosystematics; Taxonomy and Biodiversity**  
jennifer.bennett@imperial.ac.uk

**All other Master's courses (South Kensington)**

l.barron@imperial.ac.uk

**All Master's courses (Silwood Park)**

amanda.ellis@imperial.ac.uk

**Research programmes**

james.ferguson@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/life-sciences](http://www.imperial.ac.uk/study/pg/life-sciences)

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 2:1 in biochemistry, biology or related subject
- 2 2:1 in a biological, physical, computational or mathematical subject
- 3 2:1 in a biological or environmental subject
- 4 2:1 in a biological, ecological, or other life sciences subject, or in a physical sciences subject, and A-level mathematics
- 5 2:1 in any subject. Applicants without the relevant level of qualification but substantial field experience may be considered
- 6 2:1 in a science-based subject
- 7 2:1 in a science-based subject and, ideally, experience in environmental research or policy, and a strong interest in a research career in this field
- 8 2:1 and a commitment to a career in biosciences research
- 9 2:1 in a physical science-based subject
- 10 2:1 in a physical, engineering, mathematical, or life/biomedical sciences-based subject. A-level mathematics also normally required
- 11 2:1 in any area of biology or a related science-based subject (e.g. palaeontology, geology, marine biology, anthropology, environmental sciences)

**RESEARCH PROGRAMMES**

- 12 Normally applicants need to hold or be studying for a Master's degree and have a minimum 2:1 Bachelor's degree in an appropriate subject. Students who are not applying for a 1+3 studentship must gain support from a supervisor before applying

**English language requirement**

You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017-18* (per year)	CAMPUS
MSc	Applied Biosciences and Biotechnology	1Y FT	1	X	Home/EU: £10,500 FT Overseas: £27,300 FT	South Kensington
MSc	Bioinformatics and Theoretical Systems Biology	1Y FT	2	X	Home/EU: £9,600 FT Overseas: £27,300 FT	South Kensington
MRes	Biosystematics	1Y FT	3	✓	Home/EU: £9,600 FT	South Kensington
MRes	Computational Methods in Ecology and Evolution	1Y FT	4	✓	Overseas: £19,600 FT	Silwood Park
MSc	Computational Methods in Ecology and Evolution	1Y FT	4	X		Silwood Park
MSc	Conservation Science	1Y FT	5	X	Home/EU: £10,500 FT Overseas: £19,600 FT	Silwood Park
MSc	Ecological Applications	1Y FT	6	X	Home/EU: £9,600 FT	Silwood Park
MSc	Ecology, Evolution and Conservation	1Y FT / 2Y PT / 3Y PT	6	X	£4,800 2Y PT, £3,200 3Y PT	Silwood Park
MRes	Ecology, Evolution and Conservation Research	1Y FT / 2Y PT / 3Y PT	6	✓	Overseas: £19,600 FT, £9,800 2Y PT, £6,533 3Y PT	Silwood Park
MRes	Ecosystem and Environmental Change	1Y FT / 2Y PT	7	✓	Home/EU: £9,600 FT, £4,800 2Y PT Overseas: £19,600 FT, £9,800 2Y PT	Silwood Park
MRes	Molecular and Cellular Biosciences	1Y FT	8	✓	Home/EU: £10,500 FT Overseas: £27,300 FT	South Kensington
MRes	Molecular Plant and Microbial Sciences	1Y FT	6	✓	Home/EU: £9,600 FT Overseas: £27,300 FT	South Kensington
MRes	Plant Chemical Biology: Multidisciplinary Research for Next Generation Agri-Sciences (hosted by Department of Chemistry, see page 88)	1Y FT / 2Y PT	9	✓	Home/EU: £10,900 FT, £5,450 PT Overseas: £30,600 FT, 15,300 PT	South Kensington
MRes	Structural Molecular Biology	1Y FT	6	✓	Home/EU: £9,600 FT	South Kensington
MRes	Systems and Synthetic Biology	1Y FT	10	✓	Overseas: £27,300 FT	South Kensington
MSc	Taxonomy and Biodiversity	1Y FT / 2Y PT / 3Y PT	11	X	Home/EU: £9,600 FT, £4,800 2Y PT, £3,200 3Y PT Overseas: £19,600 FT, £9,800 2Y PT, £6,533 3Y PT	South Kensington
MRes	Tropical Forest Ecology	1Y FT / 2Y PT	6	✓	Home/EU: £12,600 FT, £6,300 PT Overseas: £22,600 FT, £11,300 PT	Silwood Park

**RESEARCH PROGRAMMES**

PhD	Life Sciences research	2-4Y FT / 4-6Y PT	12	✓	Home/EU: £4,187* FT Overseas: £22,500 FT	Silwood Park / South Kensington
MRes + PhD	Molecular and Cellular Basis of Infection (the Wellcome Trust PhD training programme)	1Y + 3Y FT	6	✓	See our website for information on fees and funding for these programmes: <a href="http://www.imperial.ac.uk/life-sciences/postgraduate/research/phd-opportunities">www.imperial.ac.uk/life-sciences/postgraduate/research/phd-opportunities</a>	South Kensington
MSc + PhD	Bioinformatics and Theoretical Systems Biology (the Wellcome Trust PhD training programme)	1Y + 3Y FT	2	X		South Kensington
MRes/ MSc + PhD	BBSRC Doctoral Training Partnership (see pages 62–63)	1Y + 3Y FT	12	X		Silwood Park / South Kensington

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

# Mathematics

## ABOUT THE DEPARTMENT

Imperial's Department of Mathematics is one of the strongest and most active in the UK. The principal aim of the Department is to train professional mathematicians to pursue the study of scientific and technological problems by mathematical methods, and to undertake research. Our research is organised into four sections: Pure Mathematics; Applied Mathematics and Mathematical Physics (including numerical analysis); Statistics; and Mathematical Finance. These sections support an extensive PhD programme (around 190 students) as well as helping us to keep our MSc courses at the cutting edge of the field.

3rd

(joint) in the UK based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Applied and Pure Mathematics

[mathsmsc@imperial.ac.uk](mailto:mathsmsc@imperial.ac.uk)

### Mathematics and Finance

[mathfin@imperial.ac.uk](mailto:mathfin@imperial.ac.uk)

### Statistics

[statsmsc@imperial.ac.uk](mailto:statsmsc@imperial.ac.uk)

### Stochastic Analysis and Mathematical Finance

[mres.inmaths@imperial.ac.uk](mailto:mres.inmaths@imperial.ac.uk)

### Mathematics research

[mathsphd@imperial.ac.uk](mailto:mathsphd@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/mathematics](http://www.imperial.ac.uk/study/pg/mathematics)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1, preferably in engineering, physics, mathematics or computer science
- 2 2:1 in mathematics, applied mathematics or a related subject such as engineering or physics
- 3 High 2:1 in mathematics or in a physical science with a strong mathematical content, i.e. several mathematics modules with an emphasis on analysis, probability theory and differential equations
- 4 2:1 in statistics, mathematics or a related subject such as engineering or physics
- 5 2:1 in mathematics or a related subject such as engineering or physics

### RESEARCH PROGRAMMES

- 6 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 7 See the Mathematics of Planet Earth CDT website for details: [mpecdt.org/admissions](http://mpecdt.org/admissions)

**English language requirement**  
You must achieve the **higher** College requirement for Mathematics of Planet Earth. For all other courses you must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc Advanced Computational Methods for Aeronautics, Flow Management and Fluid-Structure Interaction (hosted by Department of Aeronautics, see page 66)	1Y FT / 2Y PT	1	✓	Home/EU: £12,000 FT, £6,000 PT Overseas: £29,000 FT, £14,500 PT	South Kensington
MSc Applied Mathematics	1Y FT / 2Y PT	2	✗	Home/EU: £9,250 FT, £4,625 PT Overseas: £24,500 FT, £12,250 PT	South Kensington
MSc Mathematics and Finance	1Y FT / 2Y PT	3	✗	Home/EU and Overseas: £29,500 FT, £14,750 PT	South Kensington
MSc Pure Mathematics	1Y FT / 2Y PT	2	✗	Home/EU: £9,250 FT, £4,625 PT Overseas: £24,500 FT, £12,250 PT	South Kensington
MSc Statistics	1Y FT	4	✗	Home/EU: £10,000 FT Overseas: £25,000 FT	South Kensington
MRes Stochastic Analysis and Mathematical Finance	1Y FT	5	✓	Home/EU: £9,000 FT Overseas: £24,500 FT	South Kensington
<b>RESEARCH PROGRAMMES</b>					
PhD Mathematics research	3–4Y FT / 5–6Y PT	6	✓	Home/EU: £4,187 <sup>†</sup> FT Overseas: £20,700 FT	South Kensington
MRes + PhD Mathematics of Planet Earth (delivered by our joint CDT with Reading of the same name, see page 63)	1Y FT / 2Y PT + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://mpecdt.org">mpecdt.org</a>	South Kensington

We also have PhD opportunities available in the following Centres for Doctoral Training, of which Imperial is a partner institution: London School of Geometry and Number Theory (joint with UCL and KCL): [www.lsgnt-cdt.ac.uk](http://www.lsgnt-cdt.ac.uk) and Financial Computing and Analytics (joint with UCL and LSE): [www.financialcomputing.org](http://www.financialcomputing.org). Please apply directly to the relevant CDT.

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

## DEPARTMENT OF

# Physics

**ABOUT THE DEPARTMENT**

Imperial's Department of Physics is one of the largest and most prestigious in the UK, with 150 academic staff, over 200 postdocs, 900 undergraduate and 500 postgraduate students.

The Department has hosted three Nobel Prize winners in the past and is currently home to three Knights of the Realm: Sir Peter Knight, Sir John Pendry and Sir Jim Virdee; and 16 Fellows of the Royal Society including Professors Michele Dougherty, Joanna Haigh, Edward Hinds, Jenny Nelson and Adrian Sutton.

Research in the Department is structured via four themes: fundamental physics; photon science; condensed matter physics; and space, plasma and climate. Within these sections research is carried out by nine groups: Astrophysics; Condensed Matter Theory; Experimental Solid State Physics; High Energy Physics; Photonics; Plasma Physics; Quantum Optics and Laser Science; Space and Atmospheric Physics; and Theoretical Physics.

92%

of research classed as world leading or internationally excellent  
Research Excellence Framework (REF) 2014

**FIND OUT MORE****All programmes**

Loli Sanchez-Rey, Postgraduate Administrator  
l.sanchez@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/physics](http://www.imperial.ac.uk/study/pg/physics)

**ENTRY REQUIREMENTS**

Use the course table opposite to see which applies to you.

**MASTER'S COURSES**

- 1 First class (1st) Honours degree in physics. Other scientific disciplines (e.g. engineering, chemistry, mathematics) may be considered
- 2:1 in physics, mathematics or electrical engineering, or evidence of appropriate qualifications
- 2:1 in physics, chemistry, chemical engineering, electrical engineering, materials science or related subject
- First class (1st) Honours degree in physics or mathematics with theoretical physics options
- First class (1st) Honours degree in physical sciences or engineering

**RESEARCH PROGRAMMES**

- 6 Normally applicants need to hold or be studying for a Master's degree and have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 7 Check the website of your chosen CDT for details (see pages 62–63)
- 8 Normally a first class MEng/MSci degree in a relevant physical sciences or engineering discipline (or equivalent)

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

**International qualifications**

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18*	CAMPUS
MRes	Controlled Quantum Dynamics <sup>‡</sup>	1Y FT	1	✓	Home/EU: £12,500 FT Overseas: £28,100 FT	South Kensington
MSc	Optics and Photonics	1Y FT / 2Y PT	2	✓	Home/EU: £9,600 FT, £4,800 PT	South Kensington
MRes	Photonics	1Y FT	1	✓	Overseas: £25,000 FT, £12,500 PT	South Kensington
MSc	Physics	1Y FT	1	✓	Home/EU: £10,000 FT Overseas: £25,500 FT	South Kensington
MSc	Physics with Extended Research	2Y FT	1	✓	Home/EU: £7,600 FT Overseas: £19,200 FT	South Kensington
					This fee is fixed for both years.	
MSc	Physics with Nanophotonics <sup>§</sup>	1Y FT	1	✓	Home/EU: £10,000 FT	South Kensington
MSc	Physics with Shock Physics	1Y FT	1	✓	Overseas: £25,500 FT	South Kensington
MRes	Plastic Electronic Materials <sup>†</sup>	1Y FT	3	✓	Home/EU: £14,500 FT Overseas: £30,100 FT	South Kensington
MSc	Quantum Fields and Fundamental Forces	1Y FT / 2Y PT	4	✓	Home/EU: £9,600 FT, £4,800 PT Overseas: £25,000 FT, £12,500 PT	South Kensington
MSc	Theory and Simulation of Materials <sup>†</sup>	1Y FT	5	✓	Home/EU: £12,000 FT Overseas: £29,100 FT	South Kensington
<b>RESEARCH PROGRAMMES</b>						
PhD	Physics research	2–4Y FT / 4–6Y PT	6	✓	Home/EU: £4,187 <sup>¶</sup> FT Overseas: £20,400 FT	South Kensington
MRes + PhD	Controlled Quantum Dynamics (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/controlled-quantum-dynamics">www.imperial.ac.uk/controlled-quantum-dynamics</a>	South Kensington
MRes + PhD	Photonics (based in the Photonics Research Group)	1Y + 3Y FT	1	✓	See website for fees and funding: <a href="http://www.imperial.ac.uk/photonics">www.imperial.ac.uk/photonics</a>	South Kensington
MRes + PhD	Plastic Electronic Materials (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/plastic-electronics">www.imperial.ac.uk/plastic-electronics</a>	South Kensington
MSc + PhD	Quantum Engineering (delivered by the EPSRC Training and Skills Hub in Quantum Systems Engineering. Apply through the Controlled Quantum Dynamics CDT, see page 63)	1Y + 3Y FT	8	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/controlled-quantum-dynamics">www.imperial.ac.uk/controlled-quantum-dynamics</a>	South Kensington
MSc + PhD	Theory and Simulation of Materials (delivered by our CDT of the same name, see page 63)	1Y + 3Y FT	7	✓	See CDT website for fees and funding: <a href="http://www.imperial.ac.uk/theory-and-simulation-of-materials">www.imperial.ac.uk/theory-and-simulation-of-materials</a>	South Kensington

We also have PhD opportunities available in the following Centres for Doctoral Training, of which Imperial is a partner institution: Medical Imaging (joint with KCL): [www.imagingcdt.com](http://www.imagingcdt.com); Diamond Science and Technology (joint with Warwick): [www2.warwick.ac.uk/fac/sci/dst/](http://www2.warwick.ac.uk/fac/sci/dst/). Please apply directly to the relevant CDT.

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

‡ Can be a springboard to a PhD within the CDT of the same name – see the Research programmes (see above).

§ This is a stream within MSc Physics. Students choosing this stream graduate with an MSc in Physics with Nanophotonics.

# FACULTY OF MEDICINE



The Faculty of Medicine is at the forefront of translating biomedical discoveries for the benefit of local, national and global patient populations. With research funding in excess of £180 million a year, our Academic Health Science Centre partnership with Imperial College Healthcare NHS Trust, close connections with healthcare partners and multidisciplinary collaborations with the other College Faculties, we're perfectly placed to provide a world class teaching, research and training environment.

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## KEY FACTS

**Dean**  
Professor Gavin Screamton

**£ Research income**  
£182 million

**Number of staff**  
2,757

**Number of students**  
3,666

## SOME OF OUR PEOPLE...



Professor Beate Kampmann leads the new Centre for International Child Health research centre within Imperial's Institute of Global Health Innovation.



PhD student Harriet Gliddon won first prize in the Institute of Global Health Innovation's Student Challenges Competition for her proposal to transform testing for tuberculosis.



Physician and alumnus Dr Sir Michael Jacobs (PhD Clinical Medicine 1998) was recently awarded a Knighthood for services to the prevention and treatment of infectious diseases.

# Clinical Sciences

## ABOUT THE INSTITUTE

The Institute of Clinical Sciences focuses on the basic science underpinning our understanding of human disease and provides the core competencies required to translate this into improved diagnosis and treatment. It's made up of the MRC Clinical Sciences Centre (CSC), a directly funded research institute of the Medical Research Council (MRC), and the Imaging Sciences Department, which brings together groups working on MRI, ultrasound and RF modelling.

Our research programmes are organised into three sections: epigenetics; genes and metabolism; and integrative biology. Our base at the Hammersmith Campus, home to two major teaching hospitals, means we are ideally placed to work with on-site partners to facilitate translation of our work.

3rd

(joint) in the UK in clinical medicine based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Research programme

[students@csc.mrc.ac.uk](mailto:students@csc.mrc.ac.uk)

→ [www.imperial.ac.uk/study/pg/clinical-sciences](http://www.imperial.ac.uk/study/pg/clinical-sciences)

## ENTRY REQUIREMENTS

Use the course table below to see which applies to you.

### RESEARCH PROGRAMME

- Applicants need to have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject  
Other entry requirements may apply. Please see the website for details:  
[csc.mrc.ac.uk/study-here/phd-studentships](http://csc.mrc.ac.uk/study-here/phd-studentships)

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

**International qualifications**  
We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

## STUDENTSHPIS AND FELLOWSHIPS

### PhD studentships

These core MRC studentships provide three and a half years of funding for eight highly qualified students each year, who have a clear idea of the field they wish to work in and solid laboratory or research experience.

### Chain-Florey Clinical Research Fellowships

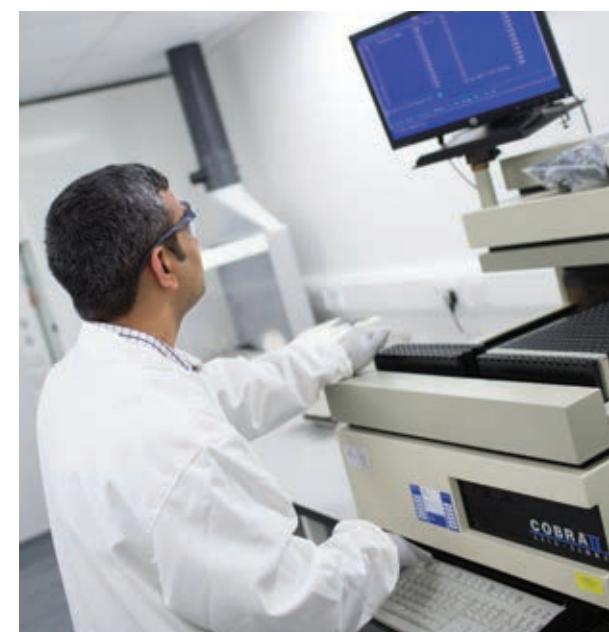
Jointly funded by the Institute and the Imperial NIHR Biomedical Research Centre (BRC), these Fellowships are aimed at medical graduates pursuing a career as an academic clinician. Emphasis is placed on the development of well-rounded researchers who are equally strong in clinical research and basic science.

### Interdisciplinary, cross-campus collaborative studentships

These three-and-a-half-year studentships have been established to promote interdisciplinary working and underpin the CSC's latest initiative in integrative biology and innovative imaging. Funded jointly by the CSC and Imperial, they are aimed at students with cross-disciplinary interests.

### IECBS studentships

These studentships have been established to strengthen the CSC's initiative in Integrative Biology. Their aim is to enhance computational and systems biology skills within the CSC by promoting research collaborations that integrate wet and dry laboratory skills. Four studentships will be awarded every year to CSC-based groups with innovative, interdisciplinary research programmes that promote interactions with relevant colleagues in the Faculties of Natural Sciences, Engineering and Medicine at Imperial.



RESEARCH PROGRAMME	DURATION	ENTRY REQ. (see above)	ATAS	FEE 2017-18* (per year)	CAMPUS
PhD Clinical Sciences research	2-4Y FT / 4-6Y PT	1	X	Home/EU: £5,650 FT Overseas: £36,100 FT	Hammersmith

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

## DEPARTMENT OF

# Medicine

## ABOUT THE DEPARTMENT

The Department of Medicine is the largest academic department at Imperial, with research covering a very broad spectrum of specialities across five divisions: diabetes, endocrinology and metabolism; experimental medicine; immunology and inflammation; infectious diseases; and brain sciences.

The Department provides world class teaching and research facilities and is committed to providing outstanding training to the next generation of clinical and basic science academics. Teaching occurs at five of Imperial's campuses: Charing Cross, Chelsea and Westminster, Hammersmith, South Kensington and St Mary's, and at Northwick Park hospital.

3rd

(joint) in the UK in clinical medicine based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Master's courses

Christopher Neill, Education Manager  
c.neill@imperial.ac.uk

### Research programmes

dom.researchdegrees@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/medicine](http://www.imperial.ac.uk/study/pg/medicine)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in a healthcare-related subject, typically nursing, dietetics, immunology/physiology or biomedical science
- 2 2:1 degree in an appropriate science subject
- 3 2:1 in medicine or life sciences
- 4 2:2 in an appropriate science subject, medicine, dentistry or veterinary science
- 5 2:2 in biological science, medicine or veterinary science
- 6 2:2 in medicine, biological dentistry or veterinary medicine
- 7 2:1 in a healthcare-related subject such as nursing, pharmacy, physiotherapy or similar health science. Students with a diploma and substantial work experience in a healthcare field may be considered, subject to successful completion of an entrance examination
- 8 2:1 in an appropriate biological science subject, ideally with some neuroscience component

### RESEARCH PROGRAMMES

Please gain support from a supervisor before applying.

- 9 Normally applicants need to either hold an MBBS degree or have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. A Master's degree is preferable but not essential
- 10 Applicants need to hold an MBBS degree

### English language requirement

You must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
PG Cert	Allergy	9 months PT	1	X	See website for fee details	St Mary's
MSc	Allergy	2Y PT / 3Y PT	1	X		St Mary's
MRes	Bacterial Pathogenesis and Infection <sup>†</sup>	1Y FT	2	X	Home/EU: £14,500 FT Overseas: £30,600 FT	South Kensington
MRes	Clinical Research <sup>†</sup> (Diabetes and Obesity/Human Nutrition/Translational Medicine)	1Y FT / 2Y PT	3	X	Home/EU: £10,000 FT, £5,000 PT Overseas: £30,600 FT, £15,300 PT	Hammersmith
MRes	Experimental Neuroscience	1Y FT	2	X	Home/EU: £13,000 FT Overseas: £30,600 FT	Hammersmith
MSc	Immunology	1Y FT	4	X	Home/EU: £10,000 FT Overseas: £30,600 FT	Hammersmith
MRes	Molecular Basis of Human Disease <sup>†</sup>	1Y FT	2	X	Home/EU: £14,500 FT Overseas: £30,600 FT	South Kensington
MSc	Molecular Biology and Pathology of Viruses	1Y FT	5	X	Home/EU: £10,000 FT Overseas: £30,600 FT	St Mary's
MSc	Molecular Medicine	1Y FT	6	X		Hammersmith
PG Cert	Paediatrics and Child Health	9 months PT	7	X	See website for fee details	St Mary's
PG Dip	Paediatrics and Child Health	2Y PT	7	X		St Mary's
MSc	Paediatrics and Child Health	2Y PT / 3Y PT	7	X		St Mary's
MSc	Translational Neuroscience	1Y FT	8	X	Home/EU: £10,000 FT Overseas: £30,600 FT	Hammersmith

### RESEARCH PROGRAMMES

PhD	Clinical Medicine research	2–4Y FT / 4–6Y PT	9	X	Home/EU: £5,650 FT Overseas: £36,100 FT	Varies by project
MD(Res)	Clinical Medicine research	2–4Y FT / 4–6Y PT	10	X		Varies by project

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This is a stream within the Biomedical Research MRes, which is run by the Department of Surgery and Cancer, see pages 108–109.  
When completing your application please indicate your stream choice in the first line of your personal statement.

‡ Applicants should apply for the MRes in Clinical Research as the umbrella course and specify their preferred pathway in their application.

# National Heart and Lung Institute

## ABOUT THE INSTITUTE

The National Heart and Lung Institute (NHLI) is a world leading research centre investigating the causes and mechanisms underlying diseases of the cardiovascular and respiratory systems, such as asthma, chronic obstructive pulmonary disease (COPD), respiratory infections, atherosclerosis and heart failure. In addition, through a close relationship with our associated NHS trusts we are in the position to undertake research on diseases such as cystic fibrosis, interstitial lung disease and asbestos-related lung cancer.

We take a bench-to-bedside approach from basic research all the way through to translational clinical medicine. To support this work, our academic staff have access to state-of-the-art facilities, including genetic sequencing, microarrays, flow cytometry, light and confocal microscopy, magnetic resonance imaging and electron microscopy.

**3rd**  
(joint) in the UK in clinical medicine based on proportion of world leading research

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### All programmes

NHLI Education Manager  
nhli.edcentre@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/nhli](http://www.imperial.ac.uk/study/pg/nhli)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:2 degree, professional nursing registration (Registered General Nurse or Registered Sick Children's Nurse) and three years' minimum experience in cardiorespiratory nursing
- 2 2:1 in a relevant medical, biomedical or healthcare subject
- 3 2:2 in medicine or a biological, engineering or physical science subject
- 4 2:1 or MBBS degree. Applicants without the required level of qualification but at least three years' high-quality work experience in a relevant field of cardiovascular health may be considered
- 5 2:1 in an appropriate science subject

### RESEARCH PROGRAMMES

Please gain support from a supervisor before applying.

- 6 Normally applicants need to either hold an MBBS degree or hold or be studying for a Master's degree, and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 7 Applicants need to hold an MBBS degree

**English language requirement**  
You must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc	Cardiorespiratory Nursing	2Y PT	1	X	Home/EU: £5,000 PT Overseas: £15,300 PT	Royal Brompton
PG Cert	Genes, Drugs and Stem Cells – Novel Therapies <sup>†</sup>	3 months FT	5	X	See website for fee details	Royal Brompton/ South Kensington/ Hammersmith
MSc	Genes, Drugs and Stem Cells – Novel Therapies <sup>†</sup>	1Y FT	5	X		Royal Brompton/ South Kensington/ Hammersmith
PG Cert	Genomic Medicine	4 months FT / 1Y PT	2	X		Various
PG Dip	Genomic Medicine	8 months FT / 2Y PT	2	X		Various
MSc	Genomic Medicine	1Y FT / 2Y PT	2	X		Various
MSc	Medical Ultrasound (Echocardiography) <sup>‡</sup>	1Y FT	3	X	Home/EU: £10,000 FT, £5,000 PT	Hammersmith
MSc	Medical Ultrasound <sup>‡</sup>	1Y FT / 2Y PT	3	X	Overseas: £30,600 FT, £15,300 PT	Hammersmith
PG Cert	Preventive Cardiology	9 months PT	4	X	See website for fee details	Hammersmith
PG Dip	Preventive Cardiology	2Y PT	4	X		Hammersmith
MSc	Preventive Cardiology	1Y FT / 2Y PT	4	X		Hammersmith
MRes	Respiratory and Cardiovascular Science <sup>§</sup>	1Y FT	5	X	Home/EU: £14,500 FT Overseas: £30,600 FT	South Kensington/ Royal Brompton

### RESEARCH PROGRAMMES

PhD	Clinical Medicine research	2–4Y FT / 4–6Y PT	6	X	Home/EU: £5,650 FT Overseas: £36,100 FT	Varies by project
MD(Res)	Clinical Medicine research	2–4Y FT / 4–6Y PT	7	X		Varies by project

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† The PG Certificate is a condition of direct entry to the MSc.

‡ The degree title awarded will be Medical Ultrasound or Medical Ultrasound (Echocardiography) according to the subjects studied.

§ This is a stream within the Biomedical Research MRes, which is run by the Department of Surgery and Cancer, see pages 108–109.

When completing your application please indicate your stream choice in the first line of your personal statement.

# Public Health

## ABOUT THE SCHOOL

Obesity, cancer, heart disease, dementia and infectious and parasitic diseases are among the major global public health challenges in the 21<sup>st</sup> century. Imperial's School of Public Health is committed to improving the health of populations across the world and to training the next generation of public health leaders. It has departments in Epidemiology and Biostatistics; Infectious Disease Epidemiology; Primary Care and Public Health; Genomics of Common Disease; the Neuroepidemiology and Ageing Research Unit; and the Imperial Clinical Trials Unit. It also has close links with the Imperial College Academic Health Sciences Centre and the Imperial College Healthcare Trust, and hosts the MRC-PHE Centre for Environment and Health and the MRC Centre for Outbreak Analysis and Modelling.

**1st**

(joint) in the UK in public health,  
health services and primary care based  
on proportion of world leading research  
Research Excellence Framework (REF) 2014

## FIND OUT MORE

### Epidemiology

msc-epidemiology@imperial.ac.uk

### Human Molecular Genetics

Deborah Jones, Course Administrator  
deborah.jones@imperial.ac.uk

### MPH

mph-queries@imperial.ac.uk

### Research programme

Helen King, PhD Administrator  
helen.king@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/public-health](http://www.imperial.ac.uk/study/pg/public-health)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in mathematics or statistics, medicine (human and veterinary) or biological sciences
- 2 2:1 in biochemical sciences, genetics or a related subject
- 3 2:1 in a science subject or MBBS degree. Suitable applicants are likely to be those with a background in medicine, health sciences, biological sciences or environmental sciences. Mature applicants with relevant academic or professional experience will also be considered
- 4 2:1 degree in an appropriate science subject

### RESEARCH PROGRAMMES

Please gain support from a supervisor before applying.

- 5 Normally applicants need to either hold an MBBS degree or hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 6 Applicants need to hold an MBBS degree

**English language requirement**  
You must achieve the **higher** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



	MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc	Epidemiology	1Y FT	1	X	Home/EU: £10,000 FT Overseas: £30,600 FT	St Mary's
MSc	Human Molecular Genetics	1Y FT	2	X		Hammersmith
MPH	Public Health <sup>†</sup>	1Y FT	3	X		St Mary's
MRes	Epidemiology, Evolution and Control of Infectious Diseases <sup>‡</sup>	1Y FT	4	X	Home/EU: £14,500 FT Overseas: £30,600 FT	St Mary's

### RESEARCH PROGRAMMES

PhD	Clinical Medicine research	2–4Y FT / 4–6Y PT	5	X	Home/EU: £5,650 FT Overseas: £36,100 FT	Varies by project
MD(Res)	Clinical Medicine research	2–4Y FT / 4–6Y PT	6	X		Varies by project

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† Offers specialist stream in Global Health.

‡ This is a stream within the Biomedical Research MRes, which is run by the Department of Surgery and Cancer, see pages 108–109.  
When completing your application please indicate your stream choice in the first line of your personal statement.

## DEPARTMENT OF

# Surgery and Cancer

## ABOUT THE DEPARTMENT

The Department of Surgery and Cancer has five divisions: surgery; cancer; computational and systems medicine; reproductive and developmental biology; and digestive diseases. Our clinical focuses include surgical technology development, discovery biochemistry, cancer biology and medicine, and critical care and pain management.

We work closely with the Academic Health Science Centre and the NIHR Imperial Biomedical Research Centre. We also lead a Cancer Research UK Centre, which brings together the College's strengths in surgery, imaging, metabolomics, chemistry and molecular cell biology, and public health to create innovative collaborations for cancer research.

**3rd**  
*(joint) in the UK in clinical medicine based on proportion of world leading research*

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### All programmes

Susan Farrell, Postgraduate Education Manager  
 susan.farrell@imperial.ac.uk

→ [www.imperial.ac.uk/study/pg/surgery-and-cancer](http://www.imperial.ac.uk/study/pg/surgery-and-cancer)

→ [www.imperial.ac.uk/study/pg/global-health](http://www.imperial.ac.uk/study/pg/global-health)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 degree in an appropriate science subject
- 2 2:1 in any discipline, with normally at least two years' healthcare experience
- 3 2:1 in any discipline, with either a clinical background or other healthcare experience
- 4 2:1 in a science- or engineering-based subject. Applicants with a lower degree qualification but at least three years' work experience may be considered
- 5 2:1 in a healthcare-related subject, or policy/management-related subject and/or a medical degree
- 6 2:1 in a bioscience topic, for example in biology, biochemistry, biomedical science, genetics, molecular biology, zoology, or in medicine or veterinary science
- 7 2:1 in a science, engineering, computing, healthcare or education subject plus basic computing experience and normally three years' relevant healthcare experience and/or relevant teaching/education development and research experience
- 8 2:1 in a health-related science plus at least a year's clinical experience, preferably with some surgical training, or at least a year's experience in a relevant surgery-related area

### RESEARCH PROGRAMMES

Please gain support from a supervisor before applying.

- 9 Normally applicants need to either hold an MBBS degree or hold or be studying for a Master's degree and have a minimum 2:1 in a Bachelor's degree in an appropriate subject
- 10 Applicants need to hold an MBBS degree

### English language requirement

You must achieve the **standard** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)

	MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MRes	Anaesthetics, Pain Medicine and Intensive Care <sup>t</sup>	1Y FT	1	X	Home/EU: £14,500 FT Overseas: £30,600 FT	Royal Brompton
MRes	Biomedical Research	1Y FT	1	X		South Kensington
MRes	Cancer Biology	1Y FT	1	X	Home/EU: £10,000 FT Overseas: £30,600 FT	Hammersmith
MRes	Cancer Biology (Cancer Informatics) <sup>t</sup>	1Y FT	1	X		Hammersmith
MRes	Data Science <sup>t</sup>	1Y FT	1	X	Home/EU: £14,500 FT Overseas: £30,600 FT	South Kensington
PG Cert	Health Policy (Policy Theory, Economics and Public Health)	11 months PT	2	X	See website for fee details	South Kensington
PG Cert	Health Policy (Leading Innovative Change)	10 months PT	2	X		South Kensington
PG Dip	Health Policy	23 months PT	2	X		South Kensington
MSc	Health Policy <sup>s</sup>	25 months PT	2	X		South Kensington
MSc	Healthcare and Design <sup>s</sup>	2Y PT	3	X	Home/EU: £12,200 PT <sup>f</sup> Overseas: £30,600 PT <sup>f</sup>	South Kensington/ St Mary's/Royal College of Art
MRes	Medical Robotics and Image-Guided Intervention <sup>s</sup>	1Y FT	4	X	Home/EU: £10,000 FT Overseas: £29,700 FT	South Kensington
MRes	Microbiome in Health and Disease <sup>t</sup>	1Y FT	1	X	Home/EU: £14,500 FT Overseas: £30,600 FT	South Kensington
PG Cert	Patient Safety <sup>s</sup>	8 months PT	5	X	See website for fee details	St Mary's
PG Dip	Patient Safety <sup>s</sup>	16 months PT	5	X		St Mary's
MSc	Patient Safety <sup>s</sup>	24 months PT	5	X		St Mary's
PG Cert	Reproductive and Developmental Biology	6 months FT	6	X	Home/EU: £5,000 FT Overseas: £15,300 FT	Hammersmith
MSc	Reproductive and Developmental Biology	1Y FT	6	X	Home/EU: £10,000 FT Overseas: £30,600 FT	Hammersmith
PG Dip	Surgical Education	1Y PT	7	X	Home/EU: £8,000 PT Overseas: £24,500 PT	St Mary's
MEd	Surgical Education – with streams in Simulation, Technology Enhanced Learning, and Engagement	1Y FT / 2Y PT	7	X	Home/EU: £10,000 FT, £5,000 PT Overseas: £30,600 FT, £15,300 PT	St Mary's
PG Cert	Surgical Innovation	9 months PT	8	X	See website for fee details	St Mary's/ Charing Cross
PG Dip	Surgical Innovation	16 months PT	8	X		St Mary's/ Charing Cross
MSc	Surgical Innovation	2Y PT	8	X		St Mary's/ Charing Cross
<b>RESEARCH PROGRAMMES</b>						
PhD	Clinical Medicine research	2–4Y FT / 4–6Y PT	9	X	Home/EU: £5,650 FT Overseas: £36,100 FT	Varies by project
MD(Res)	Clinical Medicine research	2–4Y FT / 4–6Y PT	10	X		Varies by project

Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

<sup>t</sup> These are specialist streams within the Biomedical Research MRes. When completing your application please indicate your stream choice in the first line of your personal statement. Other streams exist within other Faculty of Medicine departments.

<sup>f</sup> This is a specialist stream within the Cancer Biology MRes.

<sup>s</sup> Run by the Institute of Global Health Innovation, see page 60.

<sup>g</sup> This is the complete fee for the course, not a yearly fee.

# IMPERIAL COLLEGE BUSINESS SCHOOL



At Imperial College Business School, we find innovative solutions to global challenges and drive business advantage through the fusion of business and technology.

Our MBA and MSc programmes equip brilliant minds with the skills required to become the next generation of business leaders.



## CONTENTS

Imperial College Business School 112

## KEY FACTS

### Dean

Professor Nelson Phillips

**Research income**  
£3 million

**Number of staff**  
254

**Number of students**  
1,488

## SOME OF OUR PEOPLE...



David Miles, Professor of Financial Economics, received a CBE in 2016 for services to monetary policy and served on the Bank of England's Monetary Policy Committee between 2009 and 2015.



MBA student Lauren Dickerson is the co-founder of Lunagen, a company that has developed a hydropower turbine system to harness energy from slow moving water to generate electricity.



MSc Finance alumnus Bassel El Koussa is one of the co-founders of Quiup, a mobile app that enables people in London to order goods and have them delivered within an hour.

IMPERIAL COLLEGE

# Business School

## ABOUT THE SCHOOL

As an integral part of the College, Imperial College Business School inspires brilliant minds to become the world's future business leaders. We're among the top one per cent of business schools worldwide, having been accredited by the three largest and most influential business school accreditation associations: AACSB (The Association to Advance Collegiate Schools of Business), AMBA (Association of MBAs) and EQUIS (European Quality Improvement System).

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MBA AND MASTER'S COURSES

- For entry requirements for all of our MBA and Master's courses please see: [www.imperial.ac.uk/business-school/programmes](http://www.imperial.ac.uk/business-school/programmes)

### DOCTORAL PROGRAMME

- For entry requirements for the doctoral programme, please see: [www.imperial.ac.uk/business-school/programmes/doctoral-degree](http://www.imperial.ac.uk/business-school/programmes/doctoral-degree)

1st

in the UK based on proportion of world leading and internationally excellent research in business and management

Research Excellence Framework (REF) 2014

## FIND OUT MORE

### MBA courses

[mba@imperial.ac.uk](mailto:mba@imperial.ac.uk)

### Master's courses

[business-school@imperial.ac.uk](mailto:business-school@imperial.ac.uk)

### Doctoral programme

[doctoral@imperial.ac.uk](mailto:doctoral@imperial.ac.uk)

→ [www.imperial.ac.uk/business-school](http://www.imperial.ac.uk/business-school)

**English language requirement**  
You must achieve the **higher** College requirement (see page 125).

### International qualifications

We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



MBA AND MASTER'S COURSES		DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017-18* (per year)	CAMPUS
MBA	Full-Time MBA	1Y FT	1	X	Home/EU and Overseas: £47,000 FT	South Kensington
MBA	Executive MBA <sup>†</sup>	23 months PT	1	X	Home/EU and Overseas: £56,100 PT <sup>†</sup>	South Kensington
MBA	Global Online MBA <sup>†</sup>	2Y PT	1	X	Home/EU and Overseas: £34,800 PT <sup>†</sup>	Online <sup>§</sup>
MBA	Weekend MBA <sup>†</sup>	21 months PT	1	X	Home/EU and Overseas: £45,200 PT <sup>†</sup>	South Kensington
MSc	Business Analytics	1Y FT	1	X	Home/EU and Overseas: £27,000 FT	South Kensington
MSc	Climate Change, Management and Finance <sup>‡</sup> (delivered in partnership with the Grantham Institute, see page 59)	1Y FT	1	X	Home/EU: £15,600 FT Overseas: £27,000 FT	South Kensington
MSc	Economics and Strategy for Business	1Y FT	1	X	Home/EU and Overseas: £27,000 FT	South Kensington
MSc	Finance	1Y FT	1	X	Home/EU and Overseas: £32,500 FT	South Kensington
MSc	Finance and Accounting	1Y FT	1	X	Home/EU and Overseas: £32,500 FT	South Kensington
MSc	Innovation, Entrepreneurship and Management	1Y FT	1	X	Home/EU and Overseas: £27,000 FT	South Kensington
MSc	International Health Management <sup>†</sup>	1Y FT	1	X	South Kensington	
MSc	Investment and Wealth Management	1Y FT	1	X	Home/EU and Overseas: £32,500 FT	South Kensington
MSc	Management	1Y FT	1	X	Home/EU and Overseas: £27,000 FT	South Kensington
MSc	Risk Management and Financial Engineering	1Y FT	1	X	Home/EU and Overseas: £32,500 FT	South Kensington
MSc	Strategic Marketing <sup>†</sup>	1Y FT	1	X	Home/EU and Overseas: £27,000 FT	South Kensington

### DOCTORAL PROGRAMME

MRes + PhD	Doctoral programme	1 + 4Y FT	2	X	Home/EU: £4,187 <sup>†</sup> FT Overseas: £15,200 FT	South Kensington
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Y Years    FT Full-time study    PT Part-time study    ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)

‡ Courses start in September, with the following exceptions: Executive MBA (February); Global Online MBA (January and September); Weekend MBA (April); Climate Change, Management and Finance, International Health Management, and Strategic Marketing (all October).

§ Candidates will spend three weeks at our South Kensington Campus – one at the start of the first year and two at the start of the second year.

# SCIENCE COMMUNICATION UNIT

Housed within our Centre for Languages, Culture and Communication, the Science Communication Unit delivers two taught Master's courses that combine academic analysis with the development of practical and intellectual skills for students aiming for a career in science media.



## CONTENTS

Science Communication Unit 116

## KEY FACTS

**Director**  
Dr Roberto Trotta

**Number of staff**  
8

**Number of students**  
60

## SOME OF OUR PEOPLE...



Dr Stephen Webster was part of a team that produced a piece of musical theatre based on the life of Charles Darwin, which premiered in the Royal Albert Hall.



MSc Science Communication student Greta Keenan is co-editor of our student-run magazine *I, Science*, which was nominated for two awards by the Student Publication Association in 2016.



Alumnus Greg Foot (MSc Science Media Production 2006) is a BBC science presenter and an Engagement Fellow for The Wellcome Trust.

# Science Communication Unit

## ABOUT THE UNIT

The Science Communication Unit's two pioneering Master's courses in Science Communication and Science Media Production provide balanced technical and theoretical training for science graduates, who typically progress to careers in science media, public engagement and science policy. Students are encouraged to develop their creative and imaginative abilities, and to produce ideas and undertake work that will communicate science, technology and medicine in fresh and effective ways.

These courses are underpinned by the activities of our Science Communication Research Group, whose work spans both academic research and professional media practice. The Unit also organises the Science Communication Forum, which promotes debate about science and science communication across the College.

## FIND OUT MORE

### Master's courses

[liam.watson@imperial.ac.uk](mailto:liam.watson@imperial.ac.uk)

### Research programme

[stephen.webster@imperial.ac.uk](mailto:stephen.webster@imperial.ac.uk)

→ [www.imperial.ac.uk/study/pg/science-communication](http://www.imperial.ac.uk/study/pg/science-communication)

## ENTRY REQUIREMENTS

Use the course table opposite to see which applies to you.

### MASTER'S COURSES

- 1 2:1 in a scientific or science-related subject

### RESEARCH PROGRAMME

- 2 Normally applicants need to hold or be studying for a Master's degree and would typically have achieved a minimum 2:1 in a Bachelor's degree in an appropriate subject. Please gain support from a supervisor before applying

**English language requirement**  
You must achieve the **higher** College requirement (see page 125).

**International qualifications**  
We welcome applications from overseas students and accept a wide variety of international qualifications. See: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic)



Martin Baron, from *The Washington Post*, visited the College to take part in a roundtable discussion with students and staff from our Science Communication Unit.

MASTER'S COURSES	DURATION	ENTRY REQ. (see left)	ATAS	FEE 2017–18* (per year)	CAMPUS
MSc Science Communication	1Y FT / 2Y PT	1	X	Home/EU: £9,500 FT, £4,750 PT Overseas: £21,200 FT, £10,600 PT	South Kensington
MSc Science Media Production	1Y FT	1	X		South Kensington

### RESEARCH PROGRAMME

PhD	Science Communication research	2–4Y FT / 4–6Y PT	2	X	Home/EU: £4,187 <sup>†</sup> FT Overseas: £20,200 FT	South Kensington
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Y Years FT Full-time study PT Part-time study ATAS Academic Technology Approval Scheme (see page 124)

\* See terms and conditions on page 131.

† This fee is provisional and subject to change. The final fee will be based on the UK Research Councils fee, which will be confirmed in Spring 2017, and published on our website: [www.imperial.ac.uk/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/pg/fees-and-funding/tuition-fees)



# FINANCE AND ADMISSIONS

We welcome applications from qualified students from around the world.

If you're considering applying to Imperial, use this section to find out more about the process of applying for Master's study or a research programme. You can also find information on funding from the College and external sources.

An undergraduate and PhD student working in a zebrafish lab. They are researching the impact of a western-style diet on inflammation and immunoregulation, using zebrafish larvae.

# Applying for Master's study



[www.imperial.ac.uk/  
study/pg](http://www.imperial.ac.uk/study/pg)



## 1 CHOOSE A COURSE AND CHECK THE ENTRY REQUIREMENTS

Check our department pages (64–117) to see what courses are currently available. Be aware that this list may change during the year, so check our website for the most up-to-date options.

The entry requirements on our department pages are the minimum standard required for applicants with UK qualifications. For guidance on the international qualifications we accept see: [www.imperial.ac.uk/study/pg/apply/requirements/pgacademic](http://www.imperial.ac.uk/study/pg/apply/requirements/pgacademic) though please note that the grades listed here are the minimum for the College; the requirements for individual departments may vary.

All applicants must meet the College's minimum English language requirements (see page 125). Overseas students may also need to apply for an ATAS certificate before they can apply for a Tier 4 visa (see page 124).

## 2 APPLY ONLINE

All applicants must apply online at: [www.imperial.ac.uk/study/pg/apply/how-to-apply](http://www.imperial.ac.uk/study/pg/apply/how-to-apply)

Normally, you can apply for up to two courses. Your first choice will be processed first. Your second choice will only be considered if your first-choice application is unsuccessful.

You will need to upload documents with your application. This may include your CV, transcripts, degree certificates, relevant professional qualifications, evidence of your English language ability and contact details for two referees.

Most courses don't have a formal closing date, but will close when they are full, so you should apply as early as possible to avoid disappointment.

We aim to process all applications within six to eight weeks but it may take longer during busy periods.

## 3 ATTEND AN INTERVIEW

Depending on which course you are applying for, you may be invited to attend an interview. This could be in person or via Skype.

## 4 TRACK YOUR APPLICATION AND ACTION YOUR OFFER

You can use our Student e-Service to track the progress of your application. We will also email you to let you know of any changes to the status of your application, including if we make you an offer.

If you are made an offer, you can accept or decline it online and you need to do so within the given time limit or risk your offer being withdrawn. If you wish to defer your place, you need to make a written request to the appropriate admissions team.



## 5 CONSIDER YOUR FUNDING OPTIONS AND PAY YOUR COURSE DEPOSIT

You should be aware of funding deadlines, particularly if you are planning to apply for any College awards. See pages 126–129 for more information about funding your studies, including the new Postgraduate Loans for Master's study.

Taught course and research Master's offer holders need to pay a deposit as part of the offer condition(s). This will be deducted from the balance of your tuition fees.

For help with your application email: [admissions.enquiries@imperial.ac.uk](mailto:admissions.enquiries@imperial.ac.uk)

PLEASE NOTE: A non-refundable fee applies to Imperial College Business School Master's applications: £100 for MBA applications and £50 for MSc courses.

# Research applications

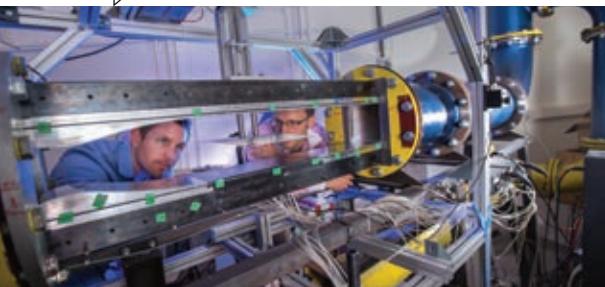
The process of preparing a research application and searching and applying for funding can be a long one, so give yourself plenty of time to do a good job – ideally at least a year before you intend to start your programme.



## 1 SEARCH OUR STUDENTSHIPS

Each year we offer a number of pre-defined research projects with funding attached. These ‘studentships’ come with a named supervisor in a particular department, centre or institute. Do your homework and read extensively around the topic to make sure it’s an area to which you can add value. You also normally have to gain the support of the supervisor before applying, so contact them in advance to introduce yourself and find out what’s expected of potential candidates.

Search our studentships:  
[www.imperial.ac.uk/job-applicants/  
opportunities/phd-vacancies](http://www.imperial.ac.uk/job-applicants/opportunities/phd-vacancies)



## OR

## PROPOSE YOUR OWN RESEARCH PROJECT

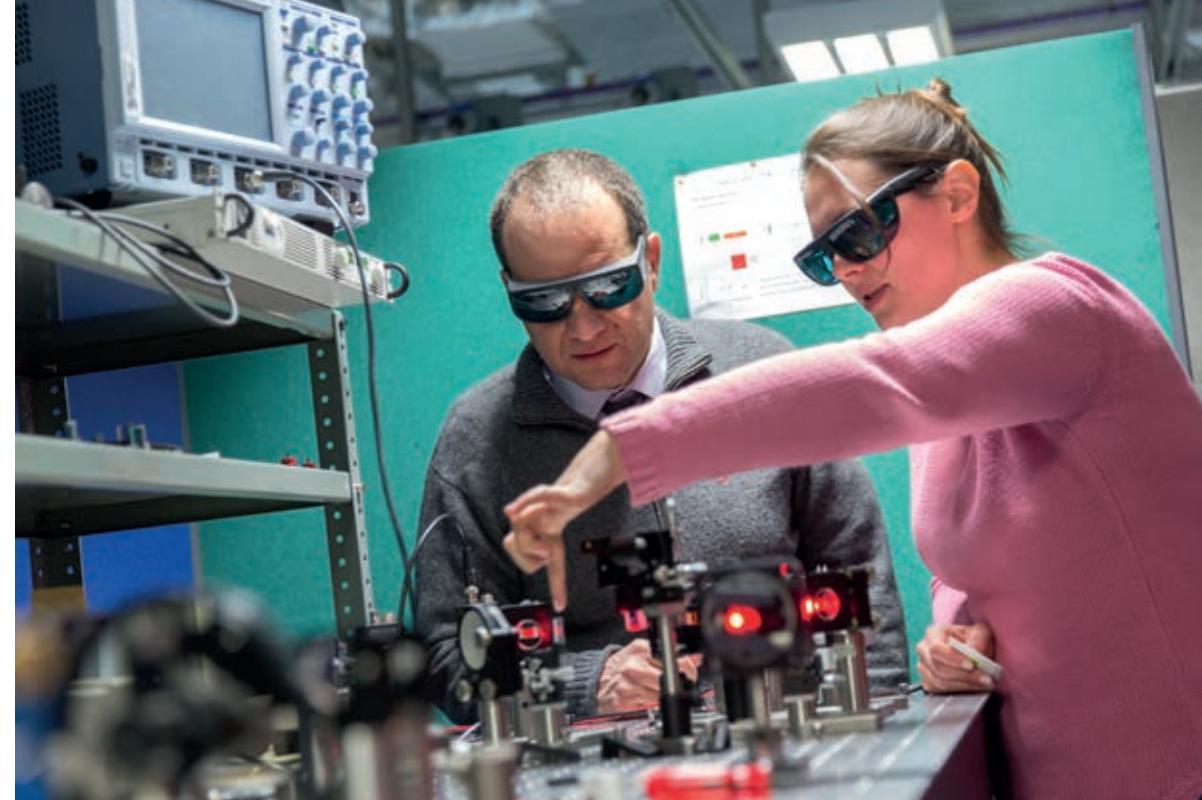
Many of our departments welcome year-round applications from suitably qualified candidates with their own research idea.

### Identify a potential supervisor

Your chosen department may expect you to gain support from a supervisor before applying – visit their website to identify potential supervisors and make sure their expertise fits with your ideas. Contact them directly to discuss your idea. They’ll want to know more about you, so it’s also appropriate to send your CV.

### Research proposal

Your potential supervisor may ask you to formalise your idea as a research proposal. This should define a clear research question and explain how your work will contribute to and develop (or challenge) existing theories in the field. It’s important to tailor your proposal to the department you’re applying to, and be prepared to take the comments of your potential supervisor on board. For more general advice on how to write a good research proposal, see: [www.findaphd.com/advice/finding/  
writing-phd-research-proposal.aspx](http://www.findaphd.com/advice/finding/writing-phd-research-proposal.aspx)



## 2 APPLY

Our studentships normally have a fixed deadline, so you should make a note of these in advance. Other departments/schemes may restrict applications to particular times.

You will need to upload documents with your application. These may include your CV, transcripts, degree certificates, relevant professional qualifications, evidence of your English language ability (see page 125) and contact details for two referees. Overseas students may need to apply for an ATAS certificate before they can apply for a Tier 4 visa (see page 124). All students should start looking for funding as soon as possible (see pages 126–129).

All applicants need to apply online:  
[www.imperial.ac.uk/study/  
pg/apply/how-to-apply](http://www.imperial.ac.uk/study/pg/apply/how-to-apply)

## 3 INTERVIEW

Most departments will want to interview you before making a formal offer of admission. This could be in person, or via Skype if it is not possible for you to visit the College.

## 4 TRACK YOUR APPLICATION

Once you have submitted your application online, you will be able to monitor the progress of your application via our Student e-Service. Details will be sent to you via email. If you are made an offer, you will be able to accept or decline it online.

## 5 REGISTER ONLINE

If you accept an offer to study at Imperial, you will be able to register online after meeting all the conditions of your offer.

# International applications

If you're considering applying to Imperial from overseas, see what additional entry requirements you need to satisfy, including the level of English language proficiency that you need to demonstrate.

## APPLYING FOR A VISA

International students from outside the EEA usually need a Tier 4 student visa. Our International Student Support team can provide up-to-date advice and guidance on applying for this visa before you travel to the UK. If you have dependants coming to join you, International Student Support staff can help with their visa applications too. This support continues when you're here, with regular immigration updates and workshops covering topics such as extending your visa to continue your studies in the UK and working in the UK after you graduate.



Find out more online:  
[www.imperial.ac.uk/study/international-students](http://www.imperial.ac.uk/study/international-students)



## ACADEMIC TECHNOLOGY APPROVAL SCHEME (ATAS)

Overseas students applying for a Master's or research programme in certain subjects may be required to apply for an Academic Technology Approval Scheme (ATAS) certificate as a condition of their offer. If this applies to you, please ensure that you make the application as soon as possible as an ATAS application can take at least 20 working days to be processed. When issued, an ATAS certificate is valid for six months to use with your visa application. If you need an ATAS certificate and cannot provide one with your visa application, it will automatically be refused.

Find out more about ATAS at:  
[www.gov.uk/academic-technology-approval-scheme](http://www.gov.uk/academic-technology-approval-scheme)

## ENGLISH LANGUAGE REQUIREMENTS

All applicants to Imperial must prove that they have a sufficiently good level of written and spoken English to meet the demands of our challenging academic environment.

Applicants from Australia, Canada, Guyana, Ireland, New Zealand, South Africa, UK, USA and the West Indies with a first degree taught in English and awarded by a university in their home country will automatically satisfy our English language requirements. All other students need to demonstrate their proficiency in English as part of the application process. For each test or qualification, you must achieve either the standard or higher College requirement – see our department pages (pages 64–117) to see which level is required for your chosen degree.

We accept a wide range of English language qualifications. We also accept test scores obtained via one of following:

## *English language requirements*

	STANDARD	HIGHER
IELTS	<b>6.5 overall</b> (minimum 6.0 in all elements)	<b>7.0 overall</b> (minimum 6.5 in all elements)
Pearson Academic (PTE)	<b>62 overall</b> (minimum 56 in all elements)	<b>69 overall</b> (minimum 62 in all elements)
TOEFL (iBT)	<b>92 overall</b> (minimum 20 in all elements)	<b>100 overall</b> (minimum 22 in all elements)

**PLEASE NOTE** Test scores are valid for two years from the date the test was taken.

See the full list of accepted qualifications:  
[www.imperial.ac.uk/study/pg/apply/requirements/english](http://www.imperial.ac.uk/study/pg/apply/requirements/english)



[www.imperial.ac.uk/  
academic-english](http://www.imperial.ac.uk/academic-english)

## PRE-SESSIONAL AND IN-SESSIONAL ENGLISH LANGUAGE

The College's Centre for Academic English runs 12-week and 6-week pre-sessional English courses for postgraduate applicants with an offer conditional on them reaching the required level of proficiency in English for admission. Passing the final assessment of either course satisfies the College's English language requirement. There is also a 3-week pre-sessional course for applicants who have already met our English language requirements but wish to extend their academic language and literacy in preparation for study at Imperial.

Free language support is available while you're studying. This includes classes and workshops on academic language and language skills; one-to-one consultations with a tutor to work on a piece of your academic writing or an oral presentation; self-study resources in the virtual learning environment, Blackboard; and the Conversation Project, which partners you with a volunteer native-speaker to practise your social and conversational English.

# Funding your studies

Completing a postgraduate qualification at Imperial requires a sustained commitment to your studies right from the start. We recommend budgeting for student life well in advance to make sure that funding issues are not a barrier to you getting the most out of your experience.



We advise you to start your search for funding as soon as possible, as deadlines for funding sources – including Research Council funding – can vary.

Whether you're embarking on a Master's qualification or you're committing to a PhD, there are two major costs to consider:

## TUITION FEES

Tuition fees for postgraduate study at Imperial vary per course. You can find the fee for your course on our website, and on the department pages of this prospectus (see terms and conditions on page 131).

[www.imperial.ac.uk/  
study/pg/fees-and-funding/  
tuition-fees](http://www.imperial.ac.uk/study/pg/fees-and-funding/tuition-fees)

## Course deposits

If you are made an offer for a Master's course at Imperial, you will need to pay a deposit as part of the offer condition(s). This will be deducted from your tuition fees.

# £10,000

*Postgraduate loans of up to £10,000 are available from the UK government for Master's study (see pages 128–129).*

PhD student Elsa Sotiriadis's research focuses on the development of a biotechnological screening system that will aid in the discovery and evaluation of new, more effective and affordable compounds for cancer therapy and research.

## LIVING COSTS

It can be costly to live in any big city, but with sensible planning it's possible to enjoy London on a budget. The table below shows a rough guide to the amount you should expect to spend to live comfortably, although actual costs will vary according to your lifestyle. Estimates cover accommodation, food and travel within London but exclude tuition fees.

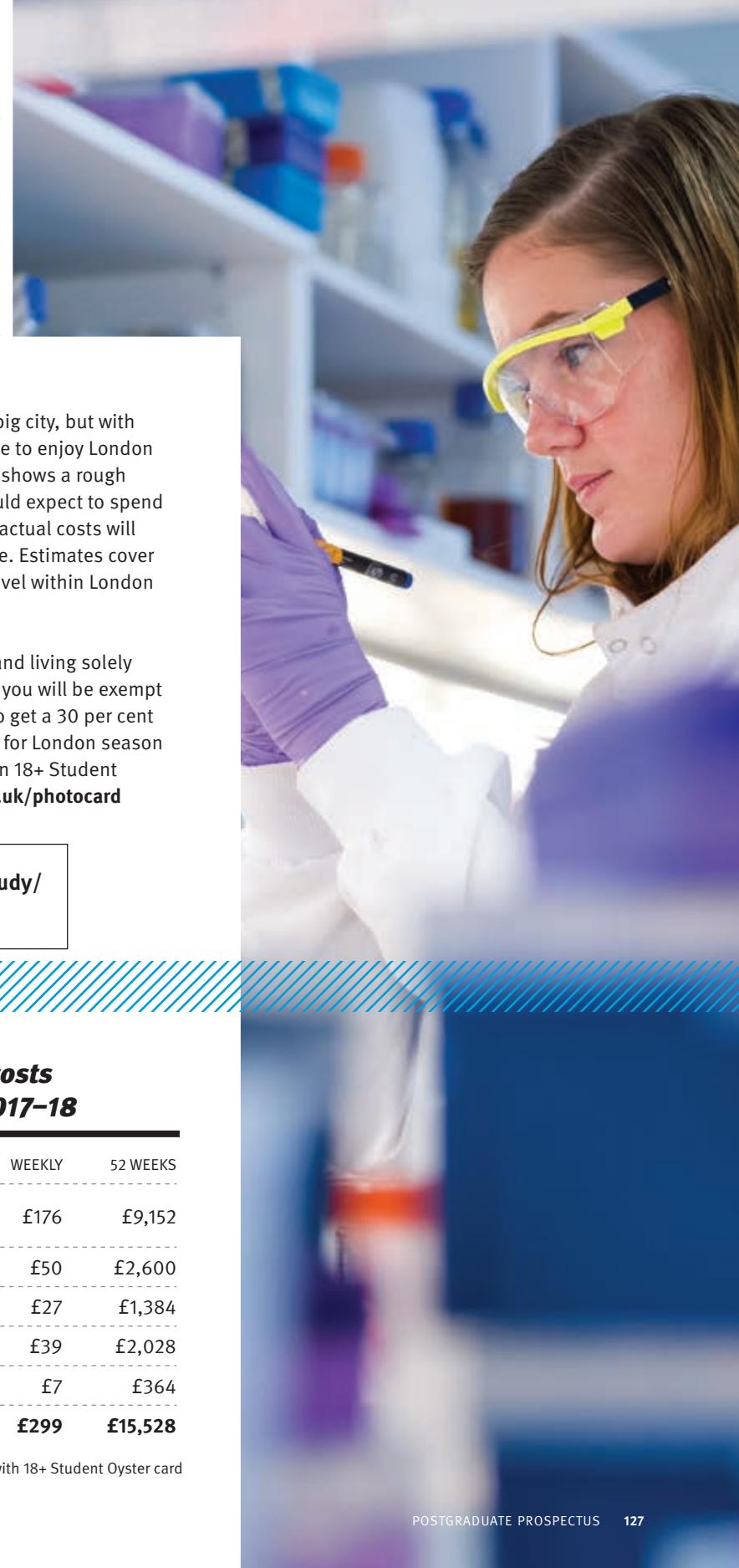
If you are studying full-time, and living solely with other full-time students, you will be exempt from Council Tax. You can also get a 30 per cent discount on certain Transport for London season tickets and travelcards with an 18+ Student Oystercard. See: [www.tfl.gov.uk/phocard](http://www.tfl.gov.uk/phocard)

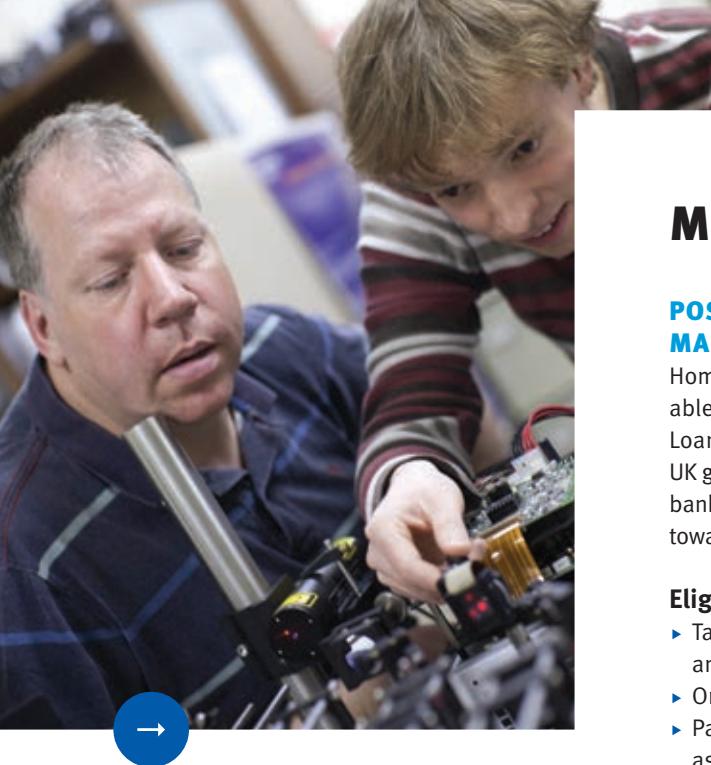
[www.imperial.ac.uk/  
study/pg/fees-and-funding](http://www.imperial.ac.uk/study/pg/fees-and-funding)

## Approximate living costs for academic year 2017–18

	WEEKLY	52 WEEKS
Accommodation and utilities	£176	£9,152
Food	£50	£2,600
Travel*	£27	£1,384
Personal and leisure	£39	£2,028
Books and course costs	£7	£364
<b>Total</b>	<b>£299</b>	<b>£15,528</b>

\* Zones 1–3 with 18+ Student Oyster card





## MASTER'S FUNDING

### POSTGRADUATE LOAN FOR MASTER'S STUDY

Home and EU students under the age of 60 may be able to apply for a non-means tested Postgraduate Loan for Master's study of up to £10,000 from the UK government. The money is paid directly into your bank account, and you can choose whether to use it towards tuition fees, living costs or other expenses.

#### Eligible courses

- ▶ Taught and research-based Master's courses in any subject, including professional Master's
- ▶ One and two year full-time courses
- ▶ Part-time courses studied over two to four years, as long as you study at 50% intensity of the equivalent full-time course (e.g. up to two years for the equivalent of a one year full-time course)

Lower level qualifications such as PG Certificates and Diplomas are not eligible, and you are not eligible if you already hold a postgraduate Master's qualification, including an integrated Master's.

For more detailed information:  
[www.imperial.ac.uk/study/pg/fees-and-funding/loans/postgraduate-loan-for-masters-study](http://www.imperial.ac.uk/study/pg/fees-and-funding/loans/postgraduate-loan-for-masters-study)

## FUNDING A PhD

### STUDENTSHPIS AND SCHOLARSHIPS

Studentships represent a major source of funding for UK and EU research students.

### Research Council-funded studentships

PhD training centres are a way in which the UK Research Councils provide funding for PhD students to encourage research in a particular area. Eligible students can apply for fully funded studentships at the relevant training centre – see pages 62–63 for details.

Use our Scholarships search tool at:  
[www.imperial.ac.uk/fees-and-funding/scholarships-search](http://www.imperial.ac.uk/fees-and-funding/scholarships-search)

### Imperial College PhD Scholarships

This scheme gives the most talented students from around the world the chance to compete for one of up to 50 full scholarships. Successful candidates receive funding for their tuition fees and a stipend of £20,600 per year for up to three and a half years to work within their chosen field. We also provide £2,000 per year for up to three years towards costs such as presenting at conferences. See:  
[www.imperial.ac.uk/fees-and-funding/icphd](http://www.imperial.ac.uk/fees-and-funding/icphd)

### Repayment

Postgraduate loans must be paid back once you complete or leave your course. Repayment will be based on your income, and payments will be made concurrently with your undergraduate loan repayments (if applicable). Please visit our website for more detailed information on loan repayment (see web link left).

### ACADEMIC SCHOLARSHIPS

Once you've identified your area of interest, it's worth checking whether your chosen department has any available scholarships. You can search all these in one place using our Scholarships search tool – be aware that eligibility criteria usually apply, for example your country of residency. Funding opportunities from external organisations are also available.

### Departmental studentships and scholarships

Our departments offer a wide variety of funding for research students. This is usually attached to specific projects to encourage research in a particular area. The funding normally covers your tuition fees (at the Home/EU rate) and an annual stipend for living costs.

Consideration for an award is usually based on academic merit or potential, though other criteria may also apply. Use our Scholarships search tool to search for existing opportunities and to find out how to apply for individual awards.

### OTHER SOURCES OF POSTGRADUATE FUNDING

Securing funding is competitive. If you are unsuccessful in securing a scholarship, you may be able to find funding from other sources, including:

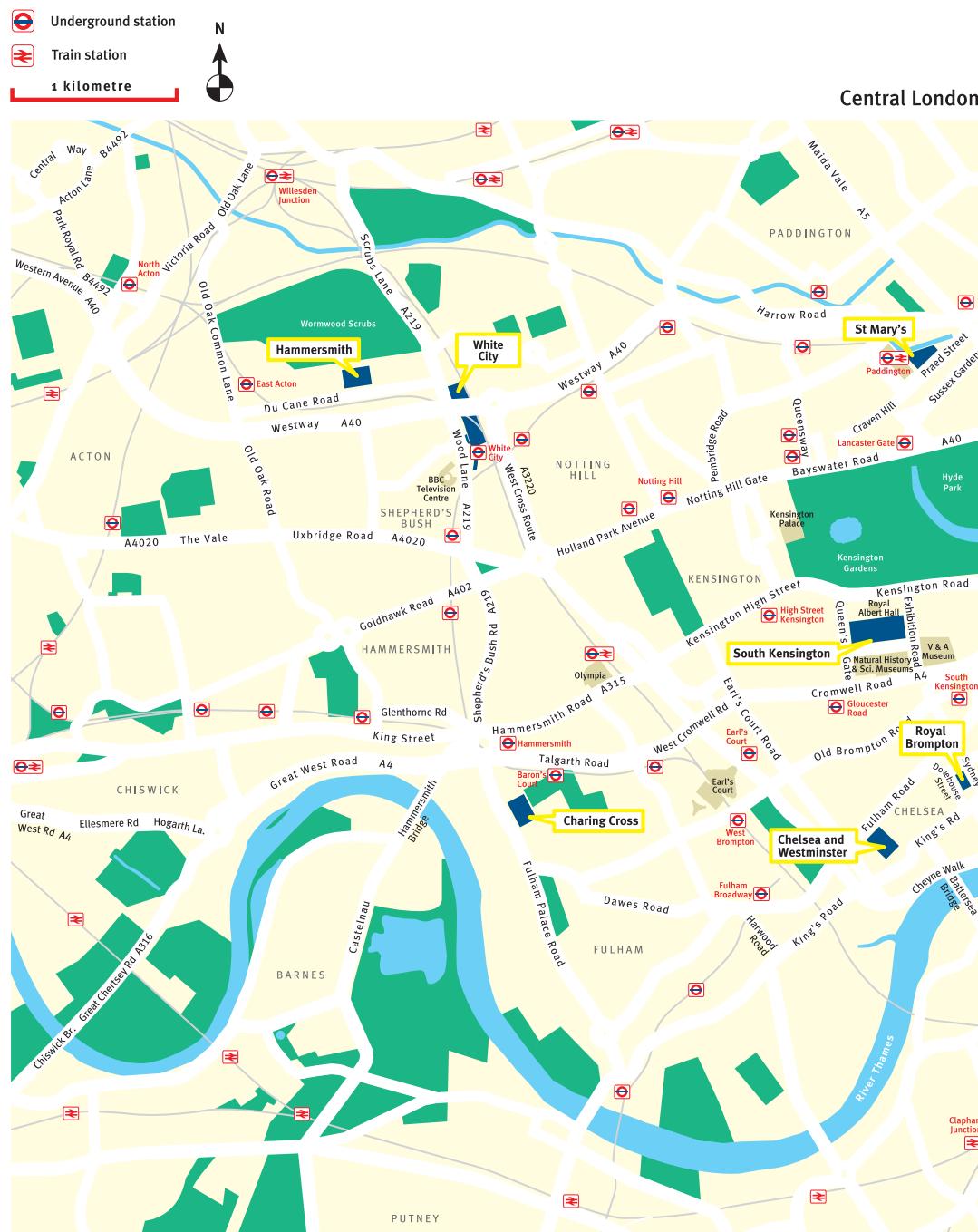
- ▶ Professional and Career Development bank loans that you can use to help pay for work-related learning. Eligibility criteria apply. See: [www.gov.uk/career-development-loans](http://www.gov.uk/career-development-loans)
- ▶ Employer sponsorship – students entering further study from or during employment may be able to get help from their employer.
- ▶ Charities and trusts – can contribute anything from a few hundred pounds for specific items to larger amounts towards tuition fees or living costs. Eligibility criteria vary. See: [www.postgraduate-funding.com](http://www.postgraduate-funding.com)
- ▶ Teaching assistantships – a number of departments offer paid teaching opportunities for PhD students.
- ▶ Sports scholarships for students who are aspiring to be, or already are, competing at national or international level. See: [www.imperial.ac.uk/sport/performance-sport](http://www.imperial.ac.uk/sport/performance-sport)

### FUNDING FOR INTERNATIONAL STUDENTS

We encourage international students to contact the Ministry of Education or British Council in their home country for funding advice. See: [www.educationuk.org](http://www.educationuk.org)

We also have a number of scholarships available to promote international collaboration.

Find out more:  
[www.imperial.ac.uk/fees-and-funding/pg/international-scholarships](http://www.imperial.ac.uk/fees-and-funding/pg/international-scholarships)



## TERMS AND CONDITIONS

### THE SMALL PRINT

#### Provision of courses

Details of courses may change following publication. For up-to-date information, please check the relevant pages on the Postgraduate Study website: [www.imperial.ac.uk/study/pg](http://www.imperial.ac.uk/study/pg)

The College will use all reasonable endeavours to deliver courses in accordance with the descriptions set out on the website. However, it reserves the right to make variations to the content or methods of delivery of courses, to discontinue courses and to merge or combine courses, if such action is considered to be necessary by the College. If the College discontinues any course, it will use reasonable endeavours to provide a suitable alternative course.

#### Entry requirements

All entry requirements listed in the prospectus are in reference to UK qualifications only and reflect the minimum requirement needed to be considered for admission. For information regarding our minimum entry requirements for international qualifications please visit our website: [www.imperial.ac.uk/study/pg/apply/requirements](http://www.imperial.ac.uk/study/pg/apply/requirements)

Achievement of the minimum requirement does not guarantee entry to the College.

#### Equivalent and lower qualifications

Since 2009–10, the government has withdrawn funding for ‘second degree students’ who are studying for a qualification that is at equivalent or lower level than a qualification that they have already been awarded. This change means that institutions may charge a supplementary fee for such students in order to compensate for the withdrawal of government funding. At present Imperial makes no extra charge although this is subject to change.

#### External websites

Imperial College London is not responsible for the content of external websites listed in this publication.

#### Tuition fees

For courses lasting more than one year, the fee beyond the first year will increase – please see our tuition fee web pages for details: [www.imperial.ac.uk/study/pg/fees-and-funding/tuition-fees](http://www.imperial.ac.uk/study/pg/fees-and-funding/tuition-fees)

The College expects that EU students will continue to pay fees at the Home/EU rate as long as the UK remains in the EU, and for the duration of their course provided this remains lawful. Please check the web link above for the latest updates to tuition fee information for EU students.

#### Payment terms

All new taught postgraduate applicants will be required to pay a deposit as a condition of their offer. The deposit is set at 10 per cent of the previous year’s course fee and will automatically be deducted from the full fee invoice. An invoice for the deposit, which will clearly show the date by which payment must be made, will be sent to the applicant via email within five working days of their acceptance of a conditional offer. An invoice for the balance of the fees will then be sent to the applicant via email within five working days of full and final (unconditional) acceptance by the College.

For sponsored applicants, receipt of the original of an official letter from the sponsoring organisation, indicating what the sponsorship covers and addressed to Imperial College London, will be required. In such cases, different arrangements for payment may apply.

#### Data protection

The College processes the personal data of applicants in order to manage the admissions process. The personal data of registered students is processed for administrative purposes. Any processing of personal data will be made in accordance with the College’s Data Protection Policy and the Data Protection Act 1998. For further details please see: [www.imperial.ac.uk/legalservicesoffice/dataprotection](http://www.imperial.ac.uk/legalservicesoffice/dataprotection)

#### Faculty statistics

Staff and student statistics on pages 65, 87, 99, 111 and 115 are total staff and student numbers per Faculty by headcount. All figures relate to the academic year 2015–16, with the exception of the research income statistics which relate to the financial year 2014–15.

For full terms and conditions see: [www.imperial.ac.uk/students/terms-and-conditions](http://www.imperial.ac.uk/students/terms-and-conditions)

#### THANK YOU

Principal photography: Thomas Angus; FJ Gaylor; Dave Guttridge/The Photographic Unit; Layton Thompson. Arranged and directed by Imperial College London.

#### Imperial is grateful to all the generous people who let us use their photos in this year's prospectus. The following additional photographs were provided courtesy of:

- p8 Davide Bonadonna; p13 Leor Roseman; p14 Caroline Purday; p18 Órama;
- p19 Motion Metrics, Guillaume Couche; p21 Samuel Rubio; p31 Research Information Network; p34 Alexander Yip; p41 London on View; p42 London on View; p44 Berkeley First/GradPad; p54 Dr Veronica Bray; p55 STFC; p61 HOK and Glowfrog; p65 Dr Queenie Hoi Shan Chan; p87 ESA/J.Mai; p99 Institute of Global Health Innovation, Royal Free London NHS Foundation Trust; p115 Greta Keenan; alexmacnaughton.com

We'd love to hear what you think about our Prospectus – get in touch:  
[prospectus@imperial.ac.uk](mailto:prospectus@imperial.ac.uk)



Designed, edited and produced by the Student Recruitment and Outreach and Communications and Public Affairs Divisions, Imperial College London, 2016.

The information given in this printed Prospectus, including that relating to the availability of courses, is current at the time of going to press, July 2016, and is subject to alteration. For the latest information, see: [www.imperial.ac.uk/study/pg](http://www.imperial.ac.uk/study/pg)

# A-Z directory

For more information  
about our courses:  
[www.imperial.ac.uk/  
study/pg](http://www.imperial.ac.uk/study/pg)

TYPE	TITLE	DURATION	DEPARTMENT	CAMPUS	PAGE
MSc	Advanced Aeronautical Engineering	1Y FT	Aeronautics	South Kensington	66
PhD	Advanced Characterisation of Materials	4Y FT	Materials	South Kensington	82
MSc	Advanced Chemical Engineering	1Y FT	Chemical Engineering	South Kensington	70
MSc	Advanced Chemical Engineering with Biotechnology	1Y FT	Chemical Engineering	South Kensington	70
MSc	Advanced Chemical Engineering with Process Systems Engineering	1Y FT	Chemical Engineering	South Kensington	70
MSc	Advanced Chemical Engineering with Structured Product Engineering	1Y FT	Chemical Engineering	South Kensington	70
MSc	Advanced Computational Methods for Aeronautics, Flow Management and Fluid-Structure Interaction	1Y FT / 2Y PT	Aeronautics	South Kensington	66
MRes	Advanced Computing	1Y FT	Computing	South Kensington	74
MSc	Advanced Computing	1Y FT	Computing	South Kensington	74
PhD	Advanced Computing: High Performance Embedded and Distributed Systems	4Y FT	Computing	South Kensington	74
MSc	Advanced Materials Science and Engineering	1Y FT	Materials	South Kensington	82
MSc	Advanced Mechanical Engineering	1Y FT / 2Y PT / 3Y PT	Mechanical Engineering	South Kensington	84
MSc	Advanced Nuclear Engineering	1Y FT	Materials	South Kensington	82
PhD	Aeronautics research	2–4Y FT / 4–6Y PT	Aeronautics	South Kensington	66
PG Cert	Allergy	9 months PT	Medicine	St Mary's	102
MSc	Allergy	2Y PT / 3Y PT	Medicine	St Mary's	102
MRes	Anaesthetics, Pain Medicine and Intensive Care <sup>1</sup>	1Y FT	Surgery and Cancer	Royal Brompton	108
MSc	Analogue and Digital Integrated Circuit Design	1Y FT	Electrical and Electronic Engineering	South Kensington	80
MSc	Applied Biosciences and Biotechnology	1Y FT	Life Sciences	South Kensington	92
MSc	Applied Mathematics	1Y FT / 2Y PT	Mathematics	South Kensington	94
MRes	Bacterial Pathogenesis and Infection <sup>1</sup>	1Y FT	Medicine	South Kensington	102
MRes +	BBSRC Doctoral Training Partnership	1Y + 3Y FT	Life Sciences	Silwood Park / South Kensington	92
PhD	Bioengineering research	2–4Y FT / 4–6Y PT	Bioengineering	South Kensington	68
MRes	Bioengineering	1Y FT	Bioengineering	South Kensington	68
PhD	Bioengineering research	2–4Y FT / 4–6Y PT	Bioengineering	South Kensington	68
MRes	Bioimaging Sciences	1Y FT	Chemistry	South Kensington / White City	88
MSc	Bioinformatics and Theoretical Systems Biology	1Y FT	Life Sciences	South Kensington	92
MSc	Biomedical Engineering	1Y FT	Bioengineering	South Kensington	68
MRes	Biomedical Research	1Y FT	Surgery and Cancer	South Kensington	108
MRes	Biosystematics	1Y FT	Life Sciences	South Kensington	92
MSc	Business Analytics	1Y FT	Business School	South Kensington	112
MRes	Cancer Biology	1Y FT	Surgery and Cancer	Hammersmith	108
MRes	Cancer Biology (Cancer Informatics) <sup>2</sup>	1Y FT	Surgery and Cancer	Hammersmith	108
PhD	Carbonates and Carbon research	2–4Y FT / 4–6Y PT	Chemical Engineering	South Kensington	70
MSc	Cardiorespiratory Nursing	2Y PT	National Heart and Lung Institute	Royal Brompton	104
MRes	Catalysis: Chemistry and Engineering	1Y FT	Chemistry	South Kensington / White City	88
MRes +	Chemical Biology	1Y + 3Y FT	Chemistry	South Kensington / White City	88
PhD					

Y Years

FT Full-time study

PT Part-time study

TYPE	TITLE	DURATION	DEPARTMENT	CAMPUS	PAGE
MRes	Chemical Biology: Multidisciplinary Physical Scientists for Next Generation Biological, Biomedical and Pharmaceutical Research and Development	1Y FT	Chemistry	South Kensington / White City	88
PhD	Chemical Engineering research	2–4Y FT / 4–6Y PT	Chemical Engineering	South Kensington	70
PhD	Chemistry research	2–4Y FT / 4–6Y PT	Chemistry	South Kensington / White City	88
PhD	Civil Engineering research	2–4Y FT / 4–6Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Climate Change, Management and Finance	1Y FT	Business School	South Kensington	112
MD(Res)	Clinical Medicine research	2–4Y FT / 4–6Y PT	Various within Faculty of Medicine	Varies by project	98
PhD	Clinical Medicine research	2–4Y FT / 4–6Y PT	Various within Faculty of Medicine	Varies by project	98
MRes	Clinical Research <sup>3</sup>	1Y FT / 2Y PT	Medicine	Hammersmith	102
PhD	Clinical Sciences research	2–4Y FT / 4–6Y PT	Institute of Clinical Sciences	Hammersmith	100
MSc	Communications and Signal Processing	1Y FT	Electrical and Electronic Engineering	South Kensington	80
MSc	Composites: the Science, Technology and Engineering Application of Advanced Composites	1Y FT / 2Y PT	Aeronautics	South Kensington	66
MRes	Computational Methods in Ecology and Evolution	1Y FT	Life Sciences	Silwood Park	92
MSc	Computational Methods in Ecology and Evolution	1Y FT	Life Sciences	Silwood Park	92
MSc	Computing (Artificial Intelligence)	1Y FT	Computing	South Kensington	74
MSc	Computing (Computational Management)	1Y FT	Computing	South Kensington	74
MSc	Computing (Machine Learning)	1Y FT	Computing	South Kensington	74
MSc	Computing (Secure Software Systems)	1Y FT	Computing	South Kensington	74
MSc	Computing (Software Engineering)	1Y FT	Computing	South Kensington	74
MSc	Computing (Visual Computing and Robotics)	1Y FT	Computing	South Kensington	74
PhD	Computing research	2–4Y FT / 4–6Y PT	Computing	South Kensington	74
MSc	Computing Science	1Y FT	Computing	South Kensington	74
MSc	Concrete Structures	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Conservation Science	1Y FT	Life Sciences	Silwood Park	92
MSc	Control Systems	1Y FT	Electrical and Electronic Engineering	South Kensington	80
MRes	Controlled Quantum Dynamics <sup>4</sup>	1Y FT	Physics	South Kensington	96
MRes +	Controlled Quantum Dynamics	1Y + 3Y FT	Physics	South Kensington	96
PhD					
MRes	Data Science <sup>1</sup>	1Y FT	Surgery and Cancer	South Kensington	108
PhD	Design Engineering research	2–4Y FT / 4–6Y PT	Dyson School of Design Engineering	South Kensington	76
MRes	Diabetes and Obesity <sup>5</sup>	1Y FT / 2Y PT	Medicine	Hammersmith	102
MRes +	Doctoral programme	1 + 4Y FT	Business School	South Kensington	112
PhD					
MRes	Drug Discovery and Development: Multidisciplinary Science for Next Generation Therapeutics	1Y FT	Chemistry	South Kensington / White City	88
PhD	Earth Science and Engineering research	2–4Y FT / 4–6Y PT	Earth Science and Engineering	South Kensington	78
MSc	Earthquake Engineering	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Ecological Applications	1Y FT	Life Sciences	Silwood Park	92
MSc	Ecology, Evolution and Conservation	1Y FT / 2Y PT / 3Y PT	Life Sciences	Silwood Park	92
MRes	Ecology, Evolution and Conservation Research	1Y FT / 2Y PT / 3Y PT	Life Sciences	Silwood Park	92
MSc	Economics and Strategy for Business	1Y FT	Business School	South Kensington	112
MRes	Ecosystem and Environmental Change	1Y FT / 2Y PT	Life Sciences	Silwood Park	92
PhD	Electrical Engineering research	2–4Y FT / 4–6Y PT	Electrical and Electronic Engineering	South Kensington	80
MSc	Engineering Fluid Mechanics for the Offshore, Coastal and Built Environments	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Environmental Engineering	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Environmental Engineering and Business Management	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Environmental Engineering and Sustainable Development	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
PhD	Environmental research	2–4Y FT / 4–6Y PT	Centre for Environmental Policy	South Kensington	90

Type	Title	Duration	Department	Campus	Page
MSc	Environmental Technology	1Y FT / 2Y FT	Centre for Environmental Policy	South Kensington	90
MSc	Epidemiology	1Y FT	School of Public Health	St Mary's	106
MRes	Epidemiology, Evolution and Control of Infectious Diseases <sup>1</sup>	1Y FT	School of Public Health	St Mary's	106
MRes	Experimental Neuroscience	1Y FT	Medicine	Hammersmith	102
MSc	Finance	1Y FT	Business School	South Kensington	112
MSc	Finance and Accounting	1Y FT	Business School	South Kensington	112
MRes	Fluid Dynamics across Scales	1Y FT	Aeronautics	South Kensington	66
MRes +	Fluid Dynamics across Scales	1Y + 3Y FT	Aeronautics	South Kensington	66
PhD					
MSc	Future Power Networks	1Y FT	Electrical and Electronic Engineering	South Kensington	80
MRes +	Future Power Networks and Smart Grids <sup>2</sup>	1Y + 3Y FT	Electrical and Electronic Engineering	Strathclyde / South Kensington	80
PhD					
MSc	General Structural Engineering	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
PG Cert	Genes, Drugs and Stem Cells – Novel Therapies <sup>6</sup>	3 months FT	National Heart and Lung Institute	Royal Brompton / South Kensington / Hammersmith	104
MSc	Genes, Drugs and Stem Cells – Novel Therapies <sup>6</sup>	1Y FT	National Heart and Lung Institute	Royal Brompton / South Kensington / Hammersmith	104
PG Cert	Genomic Medicine	4 months FT / 1Y PT	National Heart and Lung Institute	Various	104
PG Dip	Genomic Medicine	8 months FT / 2Y PT	National Heart and Lung Institute	Various	104
MSc	Genomic Medicine	1Y FT / 2Y PT	National Heart and Lung Institute	Various	104
MA/MSc	Global Innovation Design <sup>7</sup>	2Y FT	Dyson School of Design Engineering	South Kensington	76
MRes	Green Chemistry, Energy and the Environment	1Y FT	Chemistry	South Kensington/ White City	88
PG Cert	Health Policy (Policy Theory, Economics and Public Health)	11 months PT	Surgery and Cancer	South Kensington	108
PG Cert	Health Policy (Leading Innovative Change)	10 months PT	Surgery and Cancer	South Kensington	108
PG Dip	Health Policy	23 months PT	Surgery and Cancer	South Kensington	108
MSc	Health Policy	25 months PT	Surgery and Cancer	South Kensington	108
MSc	Healthcare and Design	2Y PT	Surgery and Cancer	South Kensington	108
PhD	High Performance Embedded and Distributed Systems	4Y FT	Electrical and Electronic Engineering	South Kensington	80
MSc	Human and Biological Robotics	1Y FT	Bioengineering	South Kensington	68
MSc	Human Molecular Genetics	1Y FT	School of Public Health	Hammersmith	106
MRes	Human Nutrition <sup>3</sup>	1Y FT / 2Y PT	Medicine	Hammersmith	102
MSc	Hydrology and Business Management	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Hydrology and Sustainable Development	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Hydrology and Water Resources Management	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Immunology	1Y FT	Medicine	Hammersmith	102
MA/MSc	Innovation Design Engineering <sup>7</sup>	21 months FT	Dyson School of Design Engineering	South Kensington	76
MSc	Innovation, Entrepreneurship and Management	1Y FT	Business School	South Kensington	112
MSc	International Health Management	1Y FT	Business School	South Kensington	112
MSc	Investment and Wealth Management	1Y FT	Business School	South Kensington	112
PhD	Life Sciences research	2–4Y FT / 4–6Y PT	Life Sciences	Silwood Park / South Kensington	92
MSc	Management	1Y FT	Business School	South Kensington	112
PhD	Materials research	2–4Y FT / 4–6Y PT	Materials	South Kensington	82
MSc	Mathematics and Finance	1Y FT / 2Y PT	Mathematics	South Kensington	94
MRes +	Mathematics of Planet Earth	1Y FT / 2Y PT + 3Y FT	Mathematics	South Kensington	94
PhD					
PhD	Mathematics research	3–4Y FT / 5–6Y PT	Mathematics	South Kensington	94
MBA	Full-time MBA <sup>8</sup>	1Y FT	Business School	South Kensington	112
MBA	Executive MBA <sup>8</sup>	23 months PT	Business School	South Kensington	112
MBA	Global Online MBA <sup>8</sup>	2Y PT	Business School	Online	112
MBA	Weekend MBA <sup>8</sup>	21 months PT	Business School	South Kensington	112
MD(Res)	Mechanical Engineering research	2–4Y FT / 4–6Y PT	Mechanical Engineering	South Kensington	84
PhD	Mechanical Engineering research	2–4Y FT / 4–6Y PT	Mechanical Engineering	South Kensington	84
MRes	Medical Device Design and Entrepreneurship	1Y FT	Bioengineering	South Kensington	68

Type	Title	Duration	Department	Campus	Page
MRes	Medical Robotics and Image-Guided Intervention	1Y FT	Surgery and Cancer	South Kensington	108
MSc	Medical Ultrasound (Echocardiography) <sup>9</sup>	1Y FT	National Heart and Lung Institute	Hammersmith	104
MSc	Medical Ultrasound <sup>9</sup>	1Y FT / 2Y PT	National Heart and Lung Institute	Hammersmith	104
MSc	Metals and Energy Finance	1Y FT	Earth Science and Engineering	South Kensington	78
MRes	Microbiome in Health and Disease <sup>1</sup>	1Y FT	Surgery and Cancer	South Kensington	108
MRes +	Molecular and Cellular Basis of Infection	1Y + 3Y FT	Life Sciences	South Kensington	92
PhD					
MRes	Molecular and Cellular Biosciences	1Y FT	Life Sciences	South Kensington	92
MRes	Molecular Basis of Human Disease <sup>1</sup>	1Y FT	Medicine	South Kensington	102
MSc	Molecular Biology and Pathology of Viruses	1Y FT	Medicine	St Mary's	102
MSc	Molecular Medicine	1Y FT	Medicine	Hammersmith	102
MRes	Molecular Plant and Microbial Sciences	1Y FT	Life Sciences	South Kensington	92
MRes	Molecular Science and Engineering	1Y FT	Chemical Engineering	South Kensington	70
MRes	Nanomaterials	1Y FT	Chemistry	South Kensington / White City	88
MRes	Neurotechnology	1Y FT	Bioengineering	South Kensington	68
MRes +	Neurotechnology	1Y + 3Y FT	Bioengineering	South Kensington	68
PhD					
EngD	Non-Destructive Evaluation	2–4Y FT	Mechanical Engineering	South Kensington	84
MRes +	Nuclear Energy	1Y + 3Y FT	Materials	South Kensington	82
PhD					
MSc	Optics and Photonics	1Y FT / 2Y PT	Physics	South Kensington	96
PG Cert	Paediatrics and Child Health	9 months PT	Medicine	St Mary's	102
PG Dip	Paediatrics and Child Health	2Y PT	Medicine	St Mary's	102
MSc	Paediatrics and Child Health	2Y PT / 3Y PT	Medicine	St Mary's	102
PG Cert	Patient Safety	8 months PT	Surgery and Cancer	South Kensington	108
PG Dip	Patient Safety	16 months PT	Surgery and Cancer	South Kensington	108
MSc	Patient Safety	24 months PT	Surgery and Cancer	South Kensington	108
MSc	Petroleum Engineering	1Y FT	Earth Science and Engineering	South Kensington	78
PhD	Petroleum Engineering research	2–4Y FT / 4–6Y PT	Earth Science and Engineering	South Kensington	78
MSc	Petroleum Geoscience	1Y FT	Earth Science and Engineering	South Kensington	78
MRes	Photonics	1Y FT	Physics	South Kensington	96
MRes +	Photonics	1Y + 3Y FT	Physics	South Kensington	96
PhD					
MSc	Physics	1Y FT	Physics	South Kensington	96
PhD	Physics research	2–4Y FT / 4–6Y PT	Physics	South Kensington	96
MSc	Physics with Extended Research	2Y FT	Physics	South Kensington	96
MSc	Physics with Nanophotonics <sup>10</sup>	1Y FT	Physics	South Kensington	96
MSc	Physics with Shock Physics	1Y FT	Physics	South Kensington	96
MRes	Plant Chemical Biology: Multidisciplinary Research for Next Generation Agri-Sciences	1Y FT / 2Y PT	Chemistry	South Kensington/ White City	88
MRes	Plastic Electronic Materials <sup>4</sup>	1Y FT	Physics	South Kensington	96
MRes +	Plastic Electronic Materials	1Y + 3Y FT	Physics	South Kensington	96
PhD					
PG Cert	Preventive Cardiology	9 months PT	National Heart and Lung Institute	Hammersmith	104
PG Dip	Preventive Cardiology	2Y PT	National Heart and Lung Institute	Hammersmith	104
MSc	Preventive Cardiology	1Y FT / 2Y PT	National Heart and Lung Institute	Hammersmith	104
PG Cert	Process Automation, Instrumentation and Control <sup>11</sup>	6 months–2Y PT	Chemical Engineering	South Kensington	70
PG Dip	Process Automation, Instrumentation and Control <sup>11</sup>	1–3Y PT	Chemical Engineering	South Kensington	70
MSc	Process Automation, Instrumentation and Control <sup>11</sup>	2–5Y PT	Chemical Engineering	South Kensington	70
MSc	Public Health <sup>12</sup>	1Y FT	School of Public Health	St Mary's	106
MSc	Pure Mathematics	1Y FT / 2Y PT	Mathematics	South Kensington	94
MSc +	Quantum Engineering	1Y + 3Y FT	Physics	South Kensington	96
PhD					
MSc	Quantum Fields and Fundamental Forces	1Y FT / 2Y PT	Physics	South Kensington	96
PG Cert	Reproductive and Developmental Biology	6 months FT	Surgery and Cancer	Hammersmith	108
MSc	Reproductive and Developmental Biology	1Y FT	Surgery and Cancer	Hammersmith	108

Type	Title	Duration	Department	Campus	Page
MRes	Respiratory and Cardiovascular Science <sup>1</sup>	1Y FT	National Heart and Lung Institute	South Kensington / Royal Brompton	104
MSc	Risk Management and Financial Engineering	1Y FT	Business School	South Kensington	112
MSc	Science Communication	1Y FT / 2Y PT	Science Communication Unit	South Kensington	116
PhD	Science Communication research	2–4Y FT / 4–6Y PT	Science Communication Unit	South Kensington	116
MSc	Science Media Production	1Y FT	Science Communication Unit	South Kensington	116
MSc	Soil Mechanics	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Soil Mechanics and Business Management	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Soil Mechanics and Engineering Seismology	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Soil Mechanics and Environmental Geotechnics	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Soil Mechanics and Sustainable Development	1Y FT / 2Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Statistics	1Y FT	Mathematics	South Kensington	94
MRes	Stochastic Analysis and Mathematical Finance	1Y FT	Mathematics	South Kensington	94
MSc	Strategic Marketing	1Y FT	Business School	South Kensington	112
MRes	Structural Molecular Biology	1Y FT	Life Sciences	South Kensington	92
MSc	Structural Steel Design	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
PG Dip	Surgical Education	1Y PT	Surgery and Cancer	St Mary's	108
MEd	Surgical Education	1Y FT / 2Y PT	Surgery and Cancer	St Mary's	108
PG Cert	Surgical Innovation	8 months PT	Surgery and Cancer	St Mary's / Charing Cross	108
PG Dip	Surgical Innovation	16 months PT	Surgery and Cancer	St Mary's / Charing Cross	108
MSc	Surgical Innovation	2Y PT	Surgery and Cancer	St Mary's / Charing Cross	108
PhD	Sustainable Civil Engineering	4Y FT	Civil and Environmental Engineering	South Kensington	72
MSc	Sustainable Energy Futures	1Y FT	Mechanical Engineering	South Kensington	84
MSc	Sustainable Retirement Investment and Management	1Y FT / 2Y PT	Centre for Environmental Policy	South Kensington	90
MRes	Systems and Synthetic Biology	1Y FT	Life Sciences	South Kensington	92
MSc	Taxonomy and Biodiversity	1Y FT / 2Y PT / 3Y PT	Life Sciences	South Kensington	92
MSc +	Theoretical Systems Biology and Bioinformatics	1Y + 3Y FT	Life Sciences	South Kensington	92
PhD	Theory and Simulation of Materials <sup>4</sup>	1Y FT	Physics	South Kensington	96
MSc +	Theory and Simulation of Materials	1Y + 3Y FT	Physics	South Kensington	96
PhD	Translational Medicine <sup>3</sup>	1Y FT / 2Y PT	Medicine	Hammersmith	102
MSc	Translational Neuroscience	1Y FT	Medicine	Hammersmith	102
MSc	Transport <sup>13</sup>	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Transport and Business Management <sup>13</sup>	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
MSc	Transport and Sustainable Development <sup>13</sup>	1Y FT / 2Y PT / 3Y PT	Civil and Environmental Engineering	South Kensington	72
MRes	Tropical Forest Ecology	1Y FT / 2Y PT	Life Sciences	Silwood Park	92
EngD	Water Engineering research <sup>14</sup>	4Y FT	Civil and Environmental Engineering	South Kensington	72

1 These are specialist streams within the Biomedical Research MRes, run by the Department of Surgery and Cancer (pages 108–109). When completing your application please indicate your stream choice in the first line of your personal statement.

2 This is a specialist stream within the Cancer Biology MRes.

3 Applicants should apply for the MRes in Clinical Research as the umbrella course and specify their preferred pathway in their application.

4 Can be a springboard to a PhD within the CDT of the same name – see the Research programmes on page 97.

5 Apply through the University of Strathclyde (eee-cdtadmissions@strath.ac.uk).

6 The PG Certificate is a condition of direct entry to the MSc.

7 Double degree course with the Royal College of Art (RCA) – all applications must be made direct to the RCA.

8 Start dates: September (Full-time MBA); February (Executive MBA); January and September (Global Online MBA); April (Weekend MBA).

9 The degree title awarded will be Medical Ultrasound or Medical Ultrasound (Echocardiography) according to the subjects studied.

10 This is a stream within MSc Physics. Students choosing this stream graduate with an MSc in Physics with Nanophotonics.

11 Applicants should apply to the PG Certificate in the first instance. On successful completion, they have the option to progress to the PG Diploma and then the MSc. This is the only entry point to these higher courses.

12 Offers specialist stream in Global Health.

13 Joint course with University College London (UCL).

14 Delivered in the Industrial Doctorate Centre in Engineering for the Water Sector, led by Cranfield University, in partnership with Imperial College London, University of Exeter, University of Sheffield and Newcastle University.



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