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The information given in this publication is correct at the time of going to press. We reserve the right to modify or cancel any statement in it and accept no responsibility for the consequences of any such changes. For the most up-to-date information, please refer to the website qmul.ac.uk.

This Prospectus has been printed on environmentally friendly material from well-managed sources.
The Queens’ Building, Mile End has a proud association with not one, but four Queens: Queen Victoria; Queen Mary (wife of King George V); Queen Elizabeth The Queen Mother; and our Patron, Queen Elizabeth II.

Queen Mary highlights
• Member of the Russell Group – the UK’s 24 leading universities
• World-class research and teaching by international leaders in their field
• In the top one per cent of the world’s universities
• Attractive residential campus in the heart of London
• Commitment to financial support – £6m in research studentships last year
• Distinguished history dating back to the foundation of St Bartholomew’s Hospital in 1123 and the start of teaching at the London Hospital Medical College, England’s first medical school in 1785.
Do you want to contribute to an area of cutting-edge research? Explore your academic interests in depth? Develop new knowledge and skills? Advance your career, or embark on a completely new path? Whatever your motivation, a postgraduate degree from Queen Mary University of London (QMUL) can help you achieve your ambitions.

We are one of the world’s leading universities, with first-class academics, inspirational teaching, and a distinguished 229-year history of preparing men and women for rewarding careers. Our postgraduate degrees are informed by the latest academic research in everything from cancer therapeutics to business management, and from aquatic ecology to commercial law. Our doctoral and masters by research programmes emphasise original and independent scholarship, while our taught masters programmes prepare you for professional life or further study.

Postgraduate study with us has a number of distinctive features: a high level of engagement with our internationally recognised academics, a campus environment in east London that fosters a real community, a commitment to financial support – more than £6m last year in the form of research studentships and scholarships – and programmes with demonstrable success in preparing you for professional life.

We offer plenty of opportunity for research and collaboration between different disciplines, regularly attract inspiring and high-profile speakers, and work closely with a range of cultural organisations, social enterprises, businesses and industry. A postgraduate degree with us will be a challenging, stimulating, and often life-changing experience.

**Russell Group university**

We are a member of the Russell Group of leading UK universities, testament to our excellence in research and teaching. The Group attracts the brightest students from all over the world and almost two-thirds of research funding in the UK. Graduates from Russell Group universities are especially valued by employers.

**Visit us**

The best way to get a feel for Queen Mary life is to join us for one of our Postgraduate Open Evenings. You can explore our campus, meet our tutors and students, and get a taste of what studying here will be like. If you are unable to visit us in person we run virtual open days, where you can speak online to current staff and students. We also have representatives in 35 countries and staff who regularly travel overseas. For more information, see page 49 or qmul.ac.uk/visitus
From our location in the heart of east London – one of the capital’s most dynamic areas – to our stunning campus, world-leading research and inspiring teaching, there’s a host of reasons to make Queen Mary your first choice.

**World-class university**
Queen Mary is a world-class university (we are in the top one per cent of universities in the world, according to the *Times Higher Education* World University Rankings in 2013), helping us to attract some of the very brightest minds to study, teach and undertake research here.

**Innovative research**
We conduct world-leading research. In 2012, we won the *Times Higher Award* for Research Project of the Year for our work into the development of a self-screening kit for the human papilloma virus. In 2013, we were shortlisted for the same award for our research into a 1,500-year-old genetic mutation connected to extreme growth (gigantism).

**Career success**
We are focused on ensuring that you leave Queen Mary with the enhanced skills and knowledge necessary to develop your career. Our postgraduates have an average salary of £32,942 on completing their course.

**High-quality teaching**
Our teaching is inspired by our world-leading research and you will be taught by academics who are genuine leaders in their field. Our academics embrace innovative teaching methods and receive national awards for their teaching (see page 8).

**Friendly campus lifestyle**
We are the only university in London able to offer a completely self-contained residential campus at our Mile End home. You will be able to enjoy all the benefits of a campus lifestyle – safety, convenience and a friendly atmosphere – while being just minutes from central London.
Exceptional facilities
We have spent more than £250m on new facilities in the past 15 years. From some of the largest open-plan laboratories in Europe in the Blizard Building, to our recently opened £21m ArtsTwo Building, award-winning Lockkeeper’s Cottage Graduate Centre – housed in an historic building alongside the Regent’s Canal – and our acclaimed student village, we offer an exceptional learning environment.

Great location
We are a short walk from fashionable Brick Lane and Shoreditch, and close to London’s financial centres, the City and Canary Wharf. Set beside the Regent’s Canal in Mile End, our main campus is within walking distance from the Olympic Park (see pages 10 and 11), and minutes from the West End on the Underground.

University of London
Queen Mary is part of the internationally recognised University of London (UoL). You will be able to use UoL’s extensive facilities, including Senate House Library and the University’s many specialist institutes and archives.

International outlook
We welcome students and staff from more than 150 countries who play a vital part in the life of the university. Our staff also conduct collaborative international research, travel to international conferences and we have links with many leading universities overseas. We were recently described by Times Higher Education as “one of the world’s 20 most international universities”.

Generous support
We can help you to secure funding for your postgraduate degree. We also offer a generous package of bursaries and studentships to our most highly qualified applicants, ensuring the brightest students receive a first-class education, regardless of their background.
A culture of research and teaching excellence

Our academics undertake world-leading research. Their work is original, informative and significant – both within specialist areas of knowledge and to wider society. It also directly informs the content of our postgraduate programmes.

Reputation for excellence
We recruit the best academics in their disciplines from around the world and have an impressive track-record of winning generous research funding. Following the most recent national assessment of research (RAE 2008), the Guardian placed us 11th in the UK.

What does this mean for you?
Our academics publish in leading journals, organise conferences, speak at public events, comment in the media, engage with our local community, and collaborate with international partners. As a postgraduate with us, you will be learning from experts in their field, who will involve you in their latest research, and share their wealth of knowledge and experience.

Teaching excellence
Our academics receive national recognition for their excellent teaching. Eight members of staff have been awarded National Teaching Fellowships – a highly prestigious national award recognising exceptional teaching – making us the most successful College in the University of London since we joined the Teaching Fellowships scheme in 2006.

Research that makes a difference
From our involvement in this century’s most exciting scientific breakthrough, the discovery of the Higgs boson, to our work exposing the problems of poverty among low-paid workers, to our award-winning cardiovascular and stroke research, we conduct research that genuinely makes a difference to society – improving health, social and living conditions, advancing our knowledge and understanding in specialist fields, and influencing public policy and debate.

We are now preparing to embark on our most ambitious project for a generation – an innovative new Life Sciences Institute. Life sciences is the interface between the natural, social and biomedical sciences and aims to provide innovations in healthcare. This initiative will bring together academics, industrial partners and the NHS to improve health and wellbeing for patients. Find out more: qmul.ac.uk/lifesciences

Research in numbers
- £100m – total research income per year
- 11th in the UK overall for research quality (Guardian analysis of RAE 2008)
- Top 10 in UK for: English, drama, geography, law, economics, materials, Hispanic studies, Russian, medicine, dentistry (Guardian analysis of RAE 2008)
- £6m per year in research council funding for PhD students
- 55 academy and society fellows
- 6 Nobel Prize-winning alumni
“The conversation with students is what I enjoy most: explaining the basic theory and then asking them to solve a problem with it. Seeing the expression on my students’ faces when things click, when they get into the swing of thinking independently and creatively – it is that buzz that makes me enjoy teaching.”

Jens-Dominik Mueller, Senior Lecturer in Engineering
We are based in east London, the hub of London’s creative community, and home to its financial centres, Canary Wharf and the City. The area is steeped in history, yet always looking to the future, and is uniquely British in its diverse character. The 2012 Olympics has sealed its status as “the place to be” in the capital. Here’s our guide to the best of the east.

**Mile End and surrounding area**

**EAT**… the area around Queen Mary has a range of good value cafés, restaurants and pubs.

**VISIT**… Mile End Park, an unusual 90-acre linear park in the heart of the East End with a ‘green bridge’, a terraced garden, and ecology, arts and sports parks; the independent Genesis Cinema (go on Wednesday night for a student discount).

**Stratford**

**VISIT**… the Olympic Park has undergone an amazing £300m transformation and re-opened as the Queen Elizabeth Olympic Park in the spring of 2014. There are five state-of-the-art sporting venues: the Stadium, the London Aquatics Centre, the Copper Box Arena (a leisure centre and venue for basketball, volleyball, etc), the Lee Valley VeloPark and the Lee Valley Hockey and Tennis Centre. There are also cafés, restaurants, cultural venues and lots of green space – around 4,000 trees are being planted as part of a plan to double the green space in the park. queenelizabetholympicpark.co.uk

**SHOP**… Westfield Stratford City – Europe’s largest urban shopping centre, with over 300 shops, from high-street staples such as Uniqlo to high-end designers such as Armani. There are also over 70 restaurants (including GBK, Busaba Eathai, and Pho), a 17-screen cinema and a 14-lane bowling alley.

**Old Street, Shoreditch and surrounding area**

**EAT**… Ginger Pig Café on Hoxton Street (great for a leisurely brunch); Big Apple Hot Dogs, a mobile cart selling amazing hot dogs; also in Hoxton – the Breakfast Club, the perfect spot for a slap-up breakfast after a night out; Cây Tre, a delicious, reasonably priced Vietnamese restaurant on Old Street.

**VISIT**… Ibid Projects gallery on Hoxton Square; Hales Gallery off Shoreditch High Street (this area is the epicentre of the East End’s art scene); The Geffrye Museum of English domestic interiors.

**SHOP**… the Columbia Road Flower Market on Sunday mornings; KK Outlet art and design book shop.
Brick Lane, Spitalfields and Whitechapel

EAT… Brick Lane is London’s ‘Curry Capital’– an entire street lined with Indian and Bangladeshi restaurants; Brick Lane Beigel Bake, open 24-hours (great for beigel emergencies).

VISIT… the Old Truman Brewery, a converted brewery and home to numerous fashion designers, artists and trendy bars; All Star Lanes, a boutique bowling alley serving burgers and cocktails; the acclaimed Whitechapel Gallery.

SHOP… Spitalfields market, with arts and craft stalls, restaurants and high-street shops. Nearby is Urban Outfitters, a great spot for sourcing retro fashions.
Docklands and Canary Wharf
EAT… Jamie’s Italian (part of Jamie Oliver’s growing empire); Wagamama for noodles; Canteen for good-value British food in a stylish setting.
VISIT… Museum of London Docklands, which explores the story of the docks from Roman settlement through to its recent regeneration.

Bethnal Green and Victoria Park
EAT… E Pellicci, on Bethnal Green Road, an Italian café and local institution which has been around since 1900. Near Victoria Park, Lauriston Road has some great cafés and restaurants including: Su Sazzagoni (Sardinian), the Fish House (posh fish and chips) and The Empress (a gastropub).
VISIT… the art galleries on Vyner Street; The V&A Museum of Childhood on Cambridge Heath Road; Bethnal Green Market, a daily street market with fresh fruit and veg, clothes and other essentials.

Charterhouse Square and surrounding area
EAT… bars and restaurants abound in Farringdon and the historic Smithfield Market. Two affordable favourites for lunch are the old-school Quality Chop House and The Farm Collective café.
VISIT… the Barbican, London’s most stylish brutalist performing arts centre. With galleries, cinema, theatre and live music. barbican.org.uk

Lincoln’s Inn Fields and surrounding area
EAT… the restaurants, cafés and bars of Covent Garden and Soho are minutes away, as is the Southbank Centre at Waterloo, home to the Royal Festival Hall, the Hayward Gallery and the Queen Elizabeth Hall.
VISIT… relax in the beautiful grounds of Lincoln’s Inn, watch a trial in the public galleries at the Royal Courts of Justice, or get lost in time at the nearby British Museum.
We are a short bus ride from Canary Wharf and only minutes from the West End on the Underground.
Engineering and Materials Science at Queen Mary has a distinguished tradition in both teaching and research, dating back to the beginning of the 1900s. Today, we continue to push the boundaries of engineering and materials science, and are committed to internationally competitive research.

The School brings together specialisms in biomedical engineering and materials, functional materials, and modelling and simulations in engineering systems. This combination creates robust degrees and enables our students to benefit from shared facilities and teaching staff, and real research strengths. Our ground-breaking research feeds into our teaching informing the content of our modules, and determining the subject areas of our research projects.

Our researchers have played a key role in recent breakthroughs in engineering and materials, including: the development of a lightweight and fully recyclable alternative to traditional polypropylene composites, the development of silk-based materials for cartilage and meniscal repair, groundbreaking proof that primary cilia are involved in the inflammatory response to cytokines, development of new computational modelling techniques for the detailed investigation of effective jet noise sources and the design of the world’s first solar-powered helicopter.

As a postgraduate student with us you will be able to learn about the very latest developments in your field. You will also benefit from the specialist degrees we offer, designed to equip you with the knowledge and skills that you will need to pursue a career in industry or research after you graduate. You will be well placed to follow in the footsteps of our recent graduates who have developed careers at companies such as Finsbury Instruments, Corin, DePuy, Ministry of Defence, BAE Systems and Astrium. Other graduates have gone on to secure academic positions at universities in the UK and abroad.

How our programmes are structured and assessed

All of our MSc programmes are made up of eight taught modules and one research project, while the MRRes includes five taught modules and a more advanced research project. The modules are taught between September and April, with examinations taking place in May. You can start your research project at any point after September, but will spend most of the summer working in the appropriate lab on your research.

School highlights

- Reputation for excellence in advanced functional materials, biomaterials, experimental and computational aerospace, and mechanical engineering and bioengineering
- Research findings incorporated into our teaching
- Links to industry including Jaguar Land Rover, Corin, Rolls Royce and Tata Steel
- We develop new technologies which have a lasting impact on society
- Exceptional laboratory facilities
“The MSc in Sustainable Energy Systems not only delivers knowledge through lectures but also through practical applications and business aspects, which makes it a more enjoyable form of knowledge-based learning”

Muhammad Mohsin Iqbal, MSc Sustainable Energy Systems
The MSc programmes are assessed by coursework and formal examinations. You can see detailed structures of each programme at sems.qmul.ac.uk/pgadmissions

The research project: developing the high-level skills for your career
All postgraduate students in the School undertake a research project or dissertation. You will organise your own research, define your project title, and compare and appraise the viability of your project, all with the guidance of your supervisor. Most projects will include computational and/or experimental elements and will be linked to a research group. Due to the multidisciplinary nature of the School, you will be able to undertake projects that encompass a wide area of engineering and materials. You will learn how to plan a research project and develop a range of other skills that are essential in any career as an engineer within an industrial or academic environment.

Excellent facilities
The School benefits from a wide range of excellent facilities and resources, which you will be able to use when you undertake your research project. These facilities include:

- Wind tunnel facilities: eight low-speed wind tunnels, three high-speed wind tunnels, full anechoic chamber, computer-based flow control system with high-speed, real-time data acquisition and processing system, colour and high-focused Schlieren systems, interactive aerodynamic simulator, and PIV system
- Experimental thermofluids engineering facilities: heat transfer and condensation rigs, IC-engine test beds and other combustion rigs, laser doppler anemometry, electron microscopy gas/particulate-sampling and analysis facilities
- Mechanical testing equipment, including analytical and computational facilities and image analysis, materials processing and fabrication, heat treatment equipment and dialectic and electrical characterisation
- Electrospray laboratories created with the support of the UK Joint Research Councils. The facilities include a wide range of instrumentation including specialist equipment of a mass spectrometer and sub microsecond resolution high-speed imaging
- A cell and tissue engineering suite with separate stem cell laboratory funded by a Wolfson grant: this houses cell culture labs, a molecular biology unit with quantitative rtPCR capability, confocal microscopy, FTIR, a radio-isotope labelling facility and a new super resolution microscope
- A general-purpose laboratory: incorporates advanced mechanical test machines and standard biochemical/cell biology analysis equipment
- A fully equipped polymer chemistry laboratory to prepare molecularly designed polymers for various nanotechnological applications. The laboratory is equipped with state-of-the-art analytical equipment and high-vacuum lines to conduct oxygen sensitive organic reactions.
• A dedicated gait lab to support computational and sport mechanics and sports and rehabilitation engineering

• The NanoVision Centre enhances the experimental nanomechanics and high-resolution imaging capabilities of the School. The centre houses two high-resolution environmental scanning electron microscopes (SEM), one with an additional focused ion beam, a custom-built atomic force microscope and a cryo-sample preparation stage. Both SEMs incorporate the latest STEM technology and are supported by transmission electron microscopy.

• The latest electron microscopes and a range of modern materials characterisation facilities including: FTIR and FT-Raman spectroscopy, x-ray fluorescence (XRF), inductively coupled plasma mass spectrometry, x-ray diffractometer (XRD), calorimetric (DTA, DSC) and thermomechanical (DMA, rheometer) techniques, analytical and computational facilities and image analysis, materials processing and fabrication, heat treatment equipment and dielectric and electrical characterisation.

• Our scanning probe laboratory contains two low-drift, high-stability closed-loop Scanning Probe Microscopes (SPM).

• Comprehensive computing facilities: our students and staff have access to a 2300-core HTC cluster, and a 512-core HPC cluster at QMUL, and access to a 6000-core HPC facility at Warwick through our participation in the MidPlus collaboration.

Leading academics
Our academics are leaders in the field, working on high-profile international research projects, including Materials Systems for Extreme Environments, AboutFlow Marie Curie (ITN), and the ESPRIT programme grant. They publish in leading journals, including Nature, Science and Proceedings of the National Academy of Sciences, write books, lead international conferences and comment in the media. To find out more, including information on their research interests, visit: sems.qmul.ac.uk/staff

Events programme
We organise a varied events programme which we encourage you to take part in. This includes regular research seminars giving you the chance to hear about the cutting-edge research taking place within the School and at other institutions. These are delivered by leading researchers from Queen Mary and other universities.
Science and Engineering International Excellence Awards

In recognition of the important investment that our international postgraduate students are making in their education, we are pleased to offer International Science and Engineering Excellence Awards. International Science and Engineering Excellence Awards will be deducted directly from your tuition fees.

The level of award that you may be eligible to receive will be based on your previous academic attainment.

• To be eligible to receive an award of £2,000 you must be on track to meet or exceed our minimum entry requirements for the programme of your choice at the point of offer.

• To be eligible to receive an award of £5,000 per year, you must hold a UK first class bachelors degree or equivalent.

There is no need to complete a separate application form to be considered for an International Science and Engineering Excellence Award. You will be considered for an award automatically on the basis of your online application to Queen Mary.

Scholarships

We offer a range of scholarships within the Faculty of Science and Engineering including up to £1,500 off tuition fees, which you are eligible for if you are a home or EU student who has a first class undergraduate degree or above. Find our more at: qmul.ac.uk/postgraduate/funding/funding_masters/scholarships/124443.html

ALUMNI PROFILE: Tariq Seraz

Studied: MSc Aerospace Engineering

Currently: Junior Airworthiness Consultant at the Civil Aviation Authority, Bangladesh

Why did you choose Queen Mary?
Queen Mary has the distinction of being the first British higher education institution to start teaching and research in aeronautics. It was reasonably easy for me to pick Queen Mary for my masters.

Can you describe your current role?
In my role I support the CAA in being responsible for maintaining safety oversight of all of the airworthiness aspects of aviation in Bangladesh, which includes Air Transport Operators, Approved Maintenance Organisations and oversight of any other person or organisation involved in the repair and maintenance of aircraft.

How did your degree from Queen Mary help you with your career?
The emphasis on practical concepts, research exposure, coupled with leading academics, helped me to develop my career in aeronautics.
“The facilities are awesome. The Library is brilliant and has a separate silent study floor and areas for group study. The lab facilities are good, with all the equipment needed and lab technicians”

Hemamalini Raghu, MSc Biomedical Engineering


**Careers and employability**

Our graduates work in research, development and consultancy positions within companies such as Airbus, Tata Steel, Rolls Royce, Dow Chemicals, DePuy, Avon Tyres, Bridgestone, DSTL (Defense S T L) and more. Many apply their degree knowledge directly, working as engineers and/or scientists in sectors relevant to those they have studied. For example, graduates from the MSc in Medical Electronics and Physics are working with hospitals and other healthcare providers maintaining and developing their advanced medical technology; graduates from the MSc Sustainable Energy Systems will have a new qualification, recognised around the world and qualifying them for varied jobs within the energy industry; and graduates from the Materials Research MSc will be able to use their skills and knowledge in research, either in industry or within a university.

Some graduates will use their MSc to secure positions within the wider fields of mechanical and general engineering. Others work in areas beyond those directly related to their degree, including regulatory bodies, teaching and finance. Graduates from our taught postgraduate programmes have a good record of employment: 81 per cent are employed or in further study (often at research level) six months after graduation, and of those, 69 per cent are in graduate-level work and/or study.

The range of skills gained through our programmes, coupled with opportunities for extra-curricular activities and work experience, has enabled our graduates to move in to careers in the UK and worldwide such as:

- **Systems Design Engineer**, Atkins Rail
- **Researcher**, Smith & Nephew
- **Engineering Research**
- **Energy Analyst**, Dixons
- **Scientist and Engineer**, MERL
- **Industrial Design Engineer**, Axon 56
- **Technologist**, National Metals Technology Centre
- **Medical Engineer**, NHS

A significant proportion of graduates also go on to undertake PhDs in engineering and materials science, and have been successful in attracting funding for these projects at Queen Mary or other universities around the world.

**Links to industry**

We have strong links with many industrial partners both in terms of research collaboration and funding. We host a bi-annual Engineering Industrial Liaison Forum, with potential employers, industry representatives and alumni working in industry. These strong industrial links, combined with the skills and training you will acquire during your studies are highly valued by potential employers.
Professional accreditation of our programmes

Our MSc programmes are continually being developed and updated to ensure that they are relevant to industry, and are accredited by the relevant professional bodies. This accreditation serves as a mark of quality that enhances your career prospects. It can also form the major component of an application for Chartered Engineer status.

The Institute of Materials, Minerals and Mining (IOM3) accredits:
- MRes Materials Research
- MSc Materials Research
- MSc Biomaterials
- MSc Dental Materials

The Royal Aeronautical society (RAeS) accredits:
- Aerospace Engineering
- Computational Aided Engineering

(Nota: UK/EU students applying to these programmes are encouraged to consider also applying to the RAeS MSc bursaries.)

The Institution of Mechanical Engineers (IMechE) accredits:
- Sustainable Energy Engineering
- Biomedical Engineering
- Aerospace Engineering
- Computational Aided Engineering

How we support you career development

We believe it is vitally important to support our students in their career development. We organise weekly careers sessions within the School tailored to your needs. These sessions also support you in making job applications, preparing CVs, and developing your interview skills. At Queen Mary we also have a dedicated Careers Consultant for PhD and post-doctoral students, providing one-to-one appointments and a careers programme for researchers.

The Careers and Enterprise team offer advice, information and guidance, and organise regular recruitment and networking events throughout the year. There are also opportunities for you to gain work experience through our temporary work recruitment agency QTemps.

In 2013-14, around 280 employers visited the campus, enabling students to meet prospective employers and get valuable advice on how to make the most of their time at university. Employers included: Morgan Stanley, Deloitte, Lloyds Banking Group, Bank of America, Merrill Lynch, Transport for London, Foreign & Commonwealth Office, Microsoft, IBM, PA Consulting, NHS, and GlaxoSmithKline.
Our research

Our engineering and materials research was highly rated in the Government’s most recent assessment of research quality (RAE 2008) – 90 per cent of our research activity was rated as ‘internationally recognised’, and 55 per cent as ‘internationally excellent’.

As a research student with us you will be registered for a Queen Mary University of London degree (MPhil/PhD) and work under the supervision of members of academic staff. There is significant collaboration and interaction between academics working in multidisciplinary research areas. Research findings are incorporated into our postgraduate teaching, which means that our graduates learn about the very latest skills and advances in their field, equipping them for their future careers. In addition, much of the research within the School is also part of two new university-wide multidisciplinary institutes:

1. Institute of Bioengineering
   (bioengineering.qmul.ac.uk)
2. Materials Research Institute
   (materials.qmul.ac.uk)

The School’s research areas are supported by external grants from UK Research Councils and government agencies including the Engineering and Physical Sciences Research Council (EPSRC), the Technology Strategy Board (TSB), the European Union and a multitude of industrial sponsors, which fund postdoctoral research studentships. A limited number of QMUL studentships are also available.

Entry requirements for research students

If you have a first or upper-second class honours degree or equivalent in a relevant subject area you will be eligible to apply for admission to our research degrees. We welcome postgraduate students who would like to undertake research in our three key research centres:

Centre for Biomedical Engineering and Materials

This Centre covers multidisciplinary research in bioengineering and has links with the QMUL Institute of Bioengineering. The research activity within the Centre is focused in the following two areas:

1. Biomaterials and Bio-interfaces
2. Biomechanics and Mechanobiology.

The aim of the Centre is to produce solutions to clinically relevant problems, through the study of normal and disordered tissue structure and function. These clinical solutions may be in the form of novel biomaterials, medical devices, implants or diagnostic systems. They may also encompass regenerative medicine or tissue engineering strategies or future pharmaceuticals. An integrated multi-scale approach is taken with respect to both structural organisation and the reactivity of tissues studied from the nano- to the macro-scale.
Centre for Modelling and Simulation in Engineering Systems
The Centre develops computational and mathematical models to investigate physical phenomena across different length scales (from large-scale fluid motions to the dynamics of molecules) and apply complex mathematical models to optimisation problems, robotics, and control systems.

Simulations are often complemented by experiments on model systems. Research in simulation and modelling is used to tackle industrial and societal problems, ranging from predicting the mechanical response of nanocomposites and biological tissues, to understanding transport in cardiovascular systems, to predicting loading by wind and water in renewable energy systems.

The applications of numerical modelling lie within both emerging fields and established ones including aerodynamic modelling of F1 cars, modelling of water and sediment transport for environmental engineering, prediction of deformations of aerospace structures, development of control systems for defence applications, modelling of drug transport, etc.

Current research activities are focused in the following areas:
- Fluid Mechanics
- Heat and Mass Transfer, Combustion
- Solid Mechanics of Nanocomposites
- Soft and Biological Materials
- Robotics and Control, Optimisation
- Molecular and Multi-scale Simulations.

Centre for Functional Nano-Materials
The work of this Centre overlaps with other research groupings. A large area of our research is in nanocomposites. A major research effort is around the creation of multifunctional polymeric materials based on carbon nanofillers such as carbon nanotubes, graphene and carbon black. Research in carbon nanostructures ranges from synthesis and electrical properties to applications and is studied in collaboration with the Department of Physics. Another area of interest lies in higher-order fullerenes filled with guest atoms and the electronic properties of nanotubes. Our research activity involves the application of carbon nanotubes in polymer composites for the creation of multi-functional materials with interesting mechanical, electrical, thermal and optical properties. A further, highly distinctive area of our research is that of micro- and nano-encapsulation. This work is based on a layer-by-layer (LbL) adsorption approach, utilising oppositely charged polyelectrolytes on colloidal template particles, including emulsions and gas bubbles. Nanoscale imaging is exemplified by the NanoVision Centre, where the development of techniques has been associated with 3D imaging of biological tissue and integrating different technologies to produce new approaches to imaging and nanomechanics.

For further information on all research programmes, contact:
Jonathon Hills, Research Administrator
j.hills@qmul.ac.uk
+44(0)20 7882 8730
sems.qmul.ac.uk/research
MSc Aerospace Engineering
One year full-time
qmul.ac.uk/msc-aero-eng

Aerospace engineering has come a long way since the Wright brothers first succeeded in powered flight in 1903. The subject has evolved and diversified, ranging in topics from aerodynamics to flight control, from space engineering to simulation and design, requiring engineers to have the ability to operate and develop advanced devices that are based on complex theoretical and computational models. The aim of this programme is to allow students with a strong engineering background to gain advanced, yet broad knowledge in aerospace engineering, while encouraging specialisation through a research project and flexibility in the course programme.

Compulsory modules:
• Research Methods and Experimental Techniques in Engineering
• Research Project

Option modules:
• Advanced Flight Control and Simulation of Aerospace Vehicles
• Computational Engineering
• Mechanics of Continua
• Vehicular Crashworthiness
• Advanced Spacecraft Design: Manoeuvring and Orbital Mechanics
• Introduction to Law for Science and Engineering
• Computational Fluid Dynamics
• Aeroelasticity
• Robotics
• Advanced High Speed Aerodynamics
• Advanced Aircraft Design

Please note: the availability of the modules listed in this section is subject to change. Please contact us to confirm the availability of specific modules before you make your application.
Our interactive flight simulator allows students to develop control systems and test designs.
MSc Biomedical Engineering
One year full-time
qmul.ac.uk/msc-biomed-eng

Biomedical engineering is a rapidly developing field of engineering that relies on inter- and multidisciplinary approaches to research and development. Applying the principles of science and engineering to biological and medical problems, it has applications in a variety of fields from the design, development and operation of complex medical devices used in diagnosis and treatment, to the development of software products and theoretical models that enhance the understanding of complex issues in the biomedical area. Specialists in this area face problems that differ significantly from the more traditional branches of engineering, but at the same time they rely on methodologies and techniques developed in the more traditional engineering fields that are adapted to their particular needs.

This programme aims to prepare specialists with advanced skills in computational modelling, numerical techniques and an in-depth understanding of engineering approaches to biological problems. On completion, you will have acquired extensive knowledge in the areas of computational solid and fluid mechanics, with a focus on biomedical applications such as biomechanics, bio-fluids, tissue engineering. You will achieve in-depth understanding of the underlying theoretical issues and the technology developments in biomedical engineering, of how to use advanced computational and theoretical apparatus to solve biomedical problems, of the development cycle of novel biomedical technologies, and of how to contribute to advanced design developments.

Compulsory modules:
- Research Methods and Experimental Techniques in Engineering
- Research Project

Option modules:
- Advanced Tissue Engineering and Regenerative Medicine
- Mechanics of Continua
- Surgical Techniques and Safety
- Biomedical Engineering in Urology
- Data Acquisition and Processing
- Introduction to Law for Science and Engineering
- Ethics and Regulatory Affairs
- Principles and Application of Medical Imaging
- Clinical Measurements
- Foundations of Intellectual Property Law and Management
- Kinesiology
- Biofluids and Solute Transport
- Computational Fluid Dynamics
The cell and tissue engineering suite includes a separate stem cell laboratory, funded by a Wolfson grant.
MSc Computer Aided Engineering
One year full-time
qmul.ac.uk/msc-comp-aided-eng

Computer Aided Engineering is one of the fastest growing fields within engineering and underpins design and analysis in all engineering disciplines. Virtual prototyping, based on the numerical analysis of structures, fluids, acoustics and many other disciplines, has become absolutely central to the industrial design and analysis process. The skills and knowledge you will develop in this MSc programme will enhance your career prospects for employment in competitive industrial companies and research institutions.

This programme aims to provide you with a solid background in computational and numerical methods, as well as the relevant aspects of modern programming languages such as C++. You will be introduced to a wide range of aspects of computation in engineering, both in structures and in fluids, including numerical optimisation. You will specialise in an engineering discipline chosen from aeronautical, mechanical, biomedical or sustainable energy engineering and will follow advanced modules in that specialisation. The numerical analysis skills you have gained are then applied to engineering problems in your final, specialised MSc project.

Compulsory modules:
• Research Methods and Experimental Techniques in Engineering
• Computational Engineering
• Computational Fluid Dynamics
• Numerical Optimisation in Engineering Design
• Research Project

Option modules:
• Mechanics of Continua
• Topics in Scientific Computing
• Computer Aided Engineering for Solids and Fluids
• Advanced Flight Control and Simulation of Aerospace Vehicles
• Advanced Environmental Engineering
• Biomedical Engineering in Urology
• Combustion Concepts and Modelling
• Advanced Fluid Dynamics and Heat Transfer
• Advanced Heat Transfer and Fluid Mechanics
• Renewable Energy Sources
• Advanced High Speed Aerodynamics
• Aeroelasticity
• Robotics
• Advanced Combustion in Reciprocating Engines
• Advanced Gas Turbines
• Implant Design and Technology
The Computational Aided Engineering programme provides you with skills you can use in a variety of applications.
MSc Medical Electronics and Physics
One year full-time, two years part-time
qmul.ac.uk/msc-medep

This programme encompasses the design of modern electronic equipment, monitoring patients, life support and surgical equipment and appropriate clinical measurement techniques for recording the variety of signals produced by the human body. The electrical safety requirements for medical equipment connected to patients are stringent and these aspects of design are emphasised. Attention is also paid to the processing of biomedical signals by computer and other means in order to enhance the information available to clinicians when attempting diagnosis. You will develop the essential techniques needed to be a successful researcher in the field, either at a university, a medical institution or within industry. We aim to prepare you for work as engineers and scientists in the field of healthcare so that you can make your own contribution to the improvement of the standard of care of patients.

Compulsory modules:
• Surgical Techniques and Safety
• Analogue Electronics
• Radiation Physics and Lasers
• Research Methods and Experimental Techniques in Engineering
• Digital Electronics
• Physiology for Medical Engineers
• Ultrasound and Imaging
• Research Project

Option modules:
• Clinical Measurements
• Chemical and Biological Sensors
The NanoVision Centre enhances the experimental nanomechanics and high resolution imaging capabilities of the School
MSc Sustainable Energy Systems
One year full-time
qmul.ac.uk/msc-sus-energy-sys

The large projected increases in global population and energy demand, led by those in developing and emerging economies, underscore the need for new workable global supplies of affordable sustainable energy, and elevate this energy need as perhaps the greatest single challenge facing the world in the 21st century. Energy derived from renewable and clean sources holds the promise of addressing the concerns of supply, security and environmental concerns. As a result, there is an increasing demand for specialists in sustainable energy systems. This demand is fuelled by increased public awareness of the energy problem, by tightening of environmental regulations, and by the emerging recruitment needs of manufacturers and energy-supply companies working in the field. The programme aims to prepare specialists with unique expertise in the fundamentals of energy and the environment, their applications for the benefit of humankind, and the ability to stay abreast of the field.

Compulsory modules:
- Research Methods and Experimental Techniques in Engineering
- Research Project

Option modules:
- Mechanics of Continua
- Renewable Energy Sources
- Advanced Fluid Dynamics and Heat Transfer
- Computational Engineering
- Advanced Environmental Engineering
- Energy Economics and Management of Sustainable Energy
- Renewable Energy Materials
- Advanced Combustion in Reciprocating Engines
- Advanced Gas Turbines
- Computational Fluid Dynamics
- Aeroelasticity
- Advanced High Speed Aerodynamics
The Sustainable Energy Systems programme leads to careers within the energy industry.
MSc Biomaterials
One year full-time
qmul.ac.uk/msc-biomat

Designed for those with conventional materials expertise, expertise in engineering or medically related disciplines, who wish to further their development into the biomaterials field, this programme will focus on biocompatibility, ethical issues, nanomaterials, and materials science function in biological systems. Biomaterials involves tailor-making materials for medical applications. Examples include: artificial skin, vascular and cardiovascular implants and devices, bone graft substitutes, new prosthetic devices, dental materials, biosensors, and controlled drug delivery. By the turn of 21st century, there was an explosion in the development of new biomedical materials, enabled by the use of absorbable biomaterials for the fabrication of scaffolds for the synthesis of tissue in vitro and as implants to facilitate the regeneration of tissue in vivo (known as regenerative medicine). Over the past decade applications in this field have rapidly expanded, with the only limits seeming to be the imagination of the biomedical material scientist and identifying appropriate applications with clinicians. These new materials have had enormous impact on the repair and replacement of injured and diseased parts of the body.

Compulsory modules:
- Research Methods and Experimental Techniques in Engineering
- Chemical and Biological Sensors
- Research Project

Option modules:
- Nanotechnology and Nanomedicine
- Materials Selection and Design
- Data Acquisition and Processing
- Advanced Structure-Property Relationships in Materials
- Advanced Tissue Engineering and Regenerative Medicine
- Introduction to Law for Science and Engineering
- Advanced Materials Characterization Techniques
- Science of Biocompatibility
- Tissue Mechanics
- Implant Design and Technology
- Foundations of Intellectual Property Law and Management
The cell and tissue labs house cell culture labs, a molecular biology unit with quantitative rtPCR capability, confocal microscopy, FTIR and a radio-isotope labelling facility.
MSc Dental Materials
One year full-time
qmul.ac.uk/msc-dent-mat

Featuring joint teaching within the Schools of Medicine and Dentistry and Engineering and Materials Science, this degree is aimed at dental surgeons, materials scientists and engineers wishing to work in the dental support industries, and the materials health sector generally. Providing you with the most up-to-date skills and knowledge of dental materials currently used in clinical dentistry, and covering the underlying principles of bioactivity and biocompatibility, you will develop a broad knowledge of the mechanical, physical and chemical properties of dental materials.

You will learn about their structural properties at both micro and macro levels and their structure-property correlations in relation to clinical and non-clinical applications. The theoretical modules are reinforced by practical research experience that can take place in either the School of Engineering and Materials Science or Medicine and Dentistry. Your research projects will be based on the programme curriculum and your research interests. On completion of the programme you will be able to justify the selection criteria and manipulation instructions for all classes of materials relevant to the practice of dentistry.

Compulsory modules:

- Research Methods and Experimental Techniques in Engineering
- Surfaces and Interfaces in Dental Materials
- Science of Biocompatibility
- Ethics and Regulatory Affairs
- Properties of Dental Material I
- Properties of Dental Materials/Processing Methods II
- Introduction to Oral Biology
- Biomineralisation and Biominimetics
- Research Project
Strong links with the School of Dentistry ensure that the Dental Materials programme is clinically relevant as well as technologically up-to-date.
MSc/MRes Materials Research
One year full-time
qmul.ac.uk/msc-mat-res
qmul.ac.uk/mres-mat-res

These programmes provide rigorous training in both theoretical and applied research for those who wish to pursue a career as a professional materials scientist. Technological advances, as well as methodological issues, have contributed to the transformation of materials and their functions. A number of challenges lie ahead as manufacturing supply chains become global, involving companies in strategic alliances and partnerships. Materials research is of great use here, as competition can only be achieved through the development of innovative approaches to the design, development and manufacture of novel materials and their characterisation.

The MSc will provide an insight into areas of manufacturing, planning and control systems, knowledge-based systems and measurements and manufacturing systems. The programme is interdisciplinary in nature and involves a combination of theoretical and practical approaches.

The Research Masters (MRes) programme is designed following guidelines provided by the Engineering and Physical Sciences Research Council (EPSRC). It provides graduates with the foundations for a research career in industry, the service sector, the public sector or academia. It serves both as a qualification in its own right for an immediate entry into a research career or as an enhanced route to a PhD through further research.

A substantial component of both programmes is the research project. This is undertaken alongside taught modules throughout the academic year, and will be based within one of the materials-based research groups of the School of Engineering and Materials Science. The MRes Materials Research may be focused in the fields of ceramics, polymers, composites, elastomers, functional materials or manufacturing technologies.

Compulsory modules:
• Research Methods and Experimental Techniques in Engineering
• Advanced Structure-Property Relationships in Materials
• Advanced Materials Characterisation Techniques
• Research Project

Option modules:
• Materials Selection and Design
• Data Acquisition and Processing
• Nanotechnology and Nanomedicine
• Environmental Properties of Polymeric Materials
• Polymer Physics
• Ceramics
• Introduction to Law for Science and Engineering
• Failure of Solids
• Composites
• Manufacturing Processes
• Total Quality Management
• Chemical and Biological Sensors
• Advanced Polymer Synthesis
• Foundations of Intellectual Property Law and Management
A general-purpose laboratory, which incorporates advanced mechanical test machines and standard biochemical/cell biology analysis equipment.
MSc Polymer Science and Nanotechnology
One year full-time
qmul.ac.uk/msc-poly-sci-tech

This programme draws on the School’s research strengths within the area of polymers and composites, and makes use of our exceptional research facilities. Our modules prepare you for an independent research project, while also increasing your knowledge of the structure and behaviours of different polymer materials. You will also learn how to decide what materials are most suitable for the design of different products, taking into consideration their environmental impact. As well as emphasising the various types of materials processes that are currently used in the field, we introduce you to the latest innovative techniques that are still in development.

Compulsory modules:
• Advanced Polymer Synthesis
• Nanocomposites
• Advanced Materials Characterization Techniques
• Research Project
• Research Methods and Experimental Techniques in Engineering

Option modules:
• Polymer Physics
• Composites
• Manufacturing Processes
• Environmental Properties of Polymeric Materials
• Introduction to Law for Science and Engineering
• Foundations of Intellectual Property Law and Management
A fully equipped polymer chemistry laboratory to prepare molecularly designed polymers for various nanotechnological applications.
A dedicated gait lab to support computational and sport mechanics and sports and rehabilitation engineering.
How to apply
All applications should be made online at sems.qmul.ac.uk/pgadmissions

Documents such as references and transcripts can be uploaded directly into the online application system.

Entry requirements
For most of our MSc programmes the minimum entry requirement is a good second-class UK degree (or international equivalent) in an engineering, physical sciences or an equivalent subject. Each application is individually assessed and other qualifications with relevant work experience may be considered in some cases.

• Engineering programmes: we normally expect applicants to have an undergraduate degree that includes some thermodynamics and fluid dynamics. Alternatively, we may make an offer at a higher grade and look closely at the maths and/or applied physics grades.

• Dental Materials MSc: we require a minimum of a 2.1 in Dentistry or a Materials Science-based programme.

Accommodation
We are the only university in central London to offer a completely self-contained residential campus, with a 2,000-bed award-winning Student Village at Mile End. There is also a good range of private accommodation in the area around the Mile End campus, and we can provide advice and information to help you find a convenient place to stay.

For more information on your accommodation options:
Tel: +44 (0)20 7882 5522
email: residences@qmul.ac.uk
residences.qmul.ac.uk

Tuition fees
You can find a full list of both UK/EU and overseas tuition fees here:
qmul.ac.uk/tuitionfees

Funding
There are a number of sources of funding available for masters and PhD students. These include a significant package of competitive Queen Mary bursaries and scholarships in a range of subject areas, as well as external sources of funding. Recent Queen Mary graduates can benefit from £1,000 alumni scholarships, and may be eligible for the Simon and Deirdre Gaskell scholarships, while we have awarded over £6m in studentships to support the most talented and ambitious new researchers in 2014. For all funding information, see:
qmul.ac.uk/postgraduate/funding

Contact us
For more information about our engineering and materials programmes:
Tel: +44(0)20 7882 8736
email: sems-pgadmissions@qmul.ac.uk
sems.qmul.ac.uk/pgadmissions

For general admissions enquiries:
Freephone: 0800 376 1800
From outside the UK: +44 (0)20 7882 5533
email: admissions@qmul.ac.uk
International students

Queen Mary has a cosmopolitan postgraduate community, with students from over 150 countries making a valuable and active contribution to academic and social life. Wherever you are from, you will find a very warm welcome at the university.

Entry requirements
Each application received at Queen Mary is evaluated on a case-by-case basis, comparing international and UK qualifications. We look at your qualifications, the institution you have attended, and any relevant work experience. You can find detailed country-specific entry requirements here:
qmul.ac.uk/international/countries

Support for international students
We offer a range of support services to help you feel at home:

Airport collection
New international students are offered a free airport collection service before the start of term in September 2015. This service will be advertised on our website, along with an online booking form: qmul.ac.uk/prearrival

The welcome programme
A welcome programme will be provided for all new international students before the start of term in September 2015. This is an opportunity to meet other international students studying a variety of programmes and gain practical advice about living and studying in London. Following the welcome programme, you can take part in a number of social events throughout the year. In 2014, these included trips to Amsterdam, Bruges, the Scottish Highlands, Wales, and the Wye Valley.

Advice and counselling
The Advice and Counselling Service offers professional advice and support to international students. We can advise you on finance and funding, Tier 4 Entry Clearance, Tier 4 extensions, immigration problems, UK work schemes after study, and offer counselling support for personal issues, such as homesickness. For further details, see:
welfare.qmul.ac.uk

International Student Society
As a new International Student at Queen Mary the International Office pays your membership fee to the International Student Society (ISS). The ISS will organise a number of social and cultural events throughout the academic year to help you immerse yourself into student life at QMUL.

Healthcare
There is a Student Health Service on campus. You (and your spouse and children if they are in the UK with you as your dependants) are entitled to free medical treatment on the UK National Health Service (NHS) if you are registered on a programme lasting six months or longer (please note: from September 2015 this may change – International Students may face a small charge to access NHS services). If your programme lasts for less
than six months, you should make sure you have adequate medical insurance cover. If you are an EEA national, you should obtain a European Health Insurance Card (EHIC) before coming to the UK, which entitles you and your family to full NHS treatment. For more information, visit: studenthealth.qmul.ac.uk

Living costs
International students will need to show evidence of having at least £9,000 for living costs plus 100 per cent of your tuition fees in order to obtain Entry Clearance under Tier 4 of the UK Visas and Immigration’s points-based system of immigration. Additional amounts need to be shown for dependants. £9,000 is based on nine months of study and is an immigration requirement only – most students require more money than this for 12 months’ living costs – normally around £11,000. For further information, visit: welfare.qmul.ac.uk/international/money

Scholarships
We want to attract the best students to Queen Mary. In recognition of the important investment that international students are making in their education, we are pleased to offer a range of scholarships to reward outstanding academic achievement. For more information, visit: qmul.ac.uk/international/feesfinance

Representatives in your country
In many countries we have offices or representatives who you can visit to discuss applying to Queen Mary. Contact details can be found at: qmul.ac.uk/international/countries

QMUL International
Members of staff at Queen Mary regularly make visits overseas to meet students and their families.

To see when we will be visiting your region or for more information on any aspect of life at Queen Mary, see: qmul.ac.uk/international/events

Contact us
Tel: +44 (0)20 7882 6530
e-mail: international-office@qmul.ac.uk
qmul.ac.uk/international

English language
All tuition and examinations at the university are in English, so a sound command of the language is essential for success. Queen Mary provides a number of programmes in English for academic purposes to help you get the most out of your study. You need to be able to cope with reading; note-taking from lectures, books, journals, and other materials; to speak well in seminars, discussion groups, and tutorials; and to present yourself effectively in written assignments and examinations.

English language requirements
If your first language is not English, you must provide evidence that your English skills are sufficient by including details of recognised language qualifications with your application. If you are an international applicant you are strongly advised to contact your local British Council Office, take the academic IELTS (International English Language Testing Service) test and submit the results with your application. Queen Mary’s minimum
requirement for postgraduates is an IELTS score of 6.5 or PTE Academic 62, however, some courses require a higher score. For detailed English language entry requirements for all of our programmes, including individual component scores, please see: qmul.ac.uk/international

For many nationals, it is now also an immigration requirement that you sit a secure English language test and meet minimum component scores as set by the UK Visas and Immigration service.

If you have English language scores slightly below the required band you may be eligible to attend one of our pre-sessional English language summer programmes before the start of your course.

English language summer programmes (pre-sessional programmes)
From June to September, we arrange a series of English language programmes for students who wish to improve their proficiency in English before starting university. The programme aims to improve your listening, speaking, reading, and writing skills; teach study skills such as note-taking, academic writing, and seminar participation; develop skills essential to working independently; and to introduce you to life in Britain. We encourage independent work and use of English by setting individual projects. Queen Mary academic staff and other visiting lecturers will give a series of lectures. We provide some residential accommodation on summer programmes in our halls of residence. Find out more: http://language-centre.sllf.qmul.ac.uk/presessionals

In-sessional English language support
The Language Centre runs a series of insessional English programmes in academic writing, grammar and vocabulary, lecture comprehension and seminar skills, and general English during the main teaching periods of the academic year. These are free of charge. Find out more: http://language-centre.sllf.qmul.ac.uk/in-sessionals

Academic study support
To help you with the transition to higher degree study, the Library runs a programme of short courses, tutorials, and drop-in classes in skills such as organisation and time management, research and note-taking, oral communication and presentation, academic writing, personal development planning and revision, and examination skills. For more information, see: library.qmul.ac.uk/academic_study_tutorials

English Language and Study Skills Office
Tel: +44 (0)20 7882 2827
email: elss@qmul.ac.uk
http://language-centre.sllf.qmul.ac.uk
SEMS has eight low-speed wind tunnels and three high-speed wind tunnels for experimental use.
A postgraduate open evening in the Octagon at our Mile End campus, historically the university's library and now an event space.
Visit us

Campus tours
We organise campus tours throughout the year. Restricted to small groups so that everyone has the chance to ask questions, these informal events are a great way to find out about living and studying here. They normally last an hour and you will be shown around by a current student. To book your place, please visit qmul.ac.uk/visitus

Postgraduate open evening
Our postgraduate open evening is held at the Mile End campus. You will be able to meet academics, see subject-specific facilities, tour research and learning facilities and speak to our support services, including Careers staff.

To book your place, please visit:
qmul.ac.uk/pgopenevening

Virtual events
We also hold virtual events during the year. For dates, virtual tours of the campus, videos and more, visit:
qmul.ac.uk/postgraduate/virtualopenday

“The lecturers are always ready to help, whether it is to do with your studies or your career options. Most of the lecturers are from industrial backgrounds, which makes it very easy to talk to them about potential jobs”

Adeel Ahmed, MSc Materials Research
The easiest way to get to Queen Mary is to use public transport. There are two Underground stations and many bus stops within a few minutes’ walk of the Mile End campus.

**Underground**
Queen Mary’s Mile End campus is located between Mile End station (Central, District, Hammersmith and City lines) and Stepney Green station (District, Hammersmith and City lines). Both stations are in London Underground Zone 2.

Our Whitechapel campus is right behind the Royal London Hospital on Whitechapel Road. Whitechapel Underground station (Hammersmith and City, and District lines) is directly across the road from the Hospital.

Based in the City of London, close to the Barbican, Queen Mary’s Charterhouse Square campus is five minutes’ walk from Barts Hospital. The nearest Underground station is Barbican (Hammersmith and City, Metropolitan and Circle lines). Farringdon is also not far away.

The nearest Underground station to the Postgraduate Law Centre at Lincoln’s Inn Fields is Holborn (Central and Piccadilly lines).

**Buses**
All of our campuses are well served by London bus routes. To plan your journey, visit: tfl.gov.uk

**Docklands Light Railway (DLR)**
The nearest DLR station to Queen Mary is Bow Church.

**Travelcards and Oystercards**
The most cost-effective and convenient way to pay for public transport in London (buses, trains, tubes, boats, trams, and DLR) is to get an Oyster card. As a student at QMUL, you are eligible for an 18+ Student Photocard which gives you 30 per cent off the price of adult-rate Travelcards and Bus and Tram Passes.

A discounted Zone 1-2 Travelcard – which gives you unlimited travel on buses, trains, tubes, and the DLR within Zone 1 (Central London) and Zone 2 (which includes Mile End) – is approximately £84. For more information, please see: tfl.gov.uk/oyster

**Cars**
Traffic is heavy and parking difficult, making driving in London an unattractive option. There are no parking places for students on campus, with the exception of students displaying an authorised blue disabled sticker (who have applied for and received a Queen Mary parking permit). Contact the Disability and Dyslexia Service for advice on: +44 (0)20 7882 2756.
**Taxis**
Black cabs use a meter to calculate your fare and you can hail one in the street. They are safe to use, but can be expensive. Mini-cabs are normal cars and charge a fixed price.

**Trains**
London is very well served by overground train stations, all within easy reach of Queen Mary’s campuses. The closest is Liverpool Street, just two stops from Mile End on the Underground (Central line). Trains from Liverpool Street run to Stansted Airport, as well as other destinations. King’s Cross and St Pancras International (for Eurostar services to mainland Europe) are both a short journey from Mile End on the Underground’s Hammersmith and City line. London Bridge and Fenchurch Street are also close by.

**Airports**
The closest airport is London City Airport – just five miles away – which offers regular flights to UK and other European cities.

Heathrow, Gatwick, Luton, Southend and Stansted are within easy reach of Queen Mary, and all can be reached in anything from one to two hours by train or Underground.

**Student travel in London**
For more information about discounted travel, safety information, and how to use the travel planning tools on the tfl website, visit: tfl.gov.uk/campaign/student-guide-to-travel-in-london

“I was very interested in sustainable energy development and futures, power generation and infrastructure, and the built environment, with a keen interest in sustainability thinking and practices. The MSc covered everything. In September 2011, I moved to Singapore to join the Energy Research Institute at Nanyang Technological University. I have worked on a diverse array of RD&D projects, which includes sustainable building technologies, solar technologies, test-bedding of different early-stage technologies and much more.”

Jatin Sarvaiya, MSc Sustainable Energy Systems (alumnus)
## Mile End campus

For more detailed campus information, see: [qmul.ac.uk/about/howtofindus](qmul.ac.uk/about/howtofindus)

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Note: Information

Visitors who require further information or assistance please go to the Main Reception in the Queen’s Building.

Please do not smoke on the campus.

These premises are alarmed and monitored by CCTV, please call Security on 020 7882 5000 for more information.

Library/bookshop

Fitness centre

Bar

Coffee place

Eatery

Staff car park

Bicycle parking

Bicycle lockers

Cash machine

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For more detailed campus information, see: [qmul.ac.uk/about/howtofindus](qmul.ac.uk/about/howtofindus)
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Library/bookshop
Fitness centre
Bar
Coffee place
Eatery
Staff car park
Bicycle parking

For more detailed campus information, see: qmul.ac.uk/about/howtofindus
We would like to thank the students who took part in these photographs. Student and departmental photography by Jorge Estevao (jdestevao.com) and Jonathan Cole (JonathanColePhotography.com)

Produced by Marketing and Communications Queen Mary University of London.

This publication has been printed using vegetable oil-based inks on environmentally friendly material from sustainably managed sources (from the Edixion paper range).

The eco-friendly low carbon printing company is ISO 14001 accredited, and operates a ‘Cradle to Grave Environmental Management System’, ensuring environmental impact is minimised throughout every aspect of print production. Key focus is placed upon energy saving, reductions of chemicals and emissions, water conservation, and waste minimisation.