The information provided in this handbook relates only to the academic year specified on the front cover. Please be aware that the information in this handbook is correct at the time of going to print. However, some information may occasionally change during the course of the year – current students will be informed if this is the case.
1. Welcome to the College

Congratulations on joining Imperial College London, the only university in the UK to focus exclusively on science, medicine, engineering and business.

From Fleming’s discovery of Penicillin to Gabor’s invention of holography, Imperial has been changing the world for well over 100 years. You’re now part of this prestigious community of discovery and we hope you will take this opportunity to make your own unique contribution.

We’re committed to providing you with the very best academic resources to enrich your experience. We also provide a dedicated support network and a range of specialist support services to make sure you have access to the appropriate help, whether that’s further training in an academic skill like note taking or simply having someone to talk to.

You’ll have access to an innovative range of professional development courses within our Graduate School throughout your time here, as well as opportunities to meet students from across the College at academic and social events – see page 6 for more information.

We actively encourage you to seek out help when you need it and try to maintain a healthy work-life balance. Our choice of over 380 clubs, societies and projects is one of the largest of any UK university, making it easy to do something different with your downtime. You also have access to gym and swimming facilities (following an annual fee of £30 in 2018-19) across our campuses.

As one of the best universities in the world, we are committed to inspiring the next generation of scientists, engineers, clinicians and business leaders by continuing to share the wonder of what we do through public engagement events. Postgraduate students, alongside our academics and undergraduate students, make a significant contribution to events such as our annual Imperial Festival and our term-time Imperial Fringe events – if you’re interested in getting involved then there will be opportunities for you to do so.
Our Principles

In 2012 the College and Imperial College Union agreed ‘Our Principles’ a series of commitments made between students and the College. The Principles are reviewed annually by the Quality Assurance and Enhancement Committee and changes recommended for Senate approval.

Imperial will provide through its staff:
- A world class education embedded in a research environment
- Advice, guidance and support
- The opportunity for students to contribute to the evaluation and development of programmes and services

Imperial will provide students with:
- Clear programme information and assessment criteria
- Clear and fair academic regulations, policies and procedures
- Details of full programme costs and financial support
- An appropriate and inclusive framework for study, learning and research

Imperial students should:
- Take responsibility for managing their own learning
- Engage with the College to review and enhance provision
- Respect, and contribute to, the Imperial community

The Imperial College Students' Union will:
- Support all students through the provision of independent academic and welfare assistance
- Encourage student participation in all aspects of the College
- Provide a range of clubs, societies, student-led projects and social activities throughout the year
- Represent the interests of students at local, national and international level

www.imperial.ac.uk/students/our-principles
Welcome from the Graduate School

Professor Sue Gibson, Director of the Graduate School

The Graduate School has several roles but our main functions are to provide a broad, effective and innovative range of professional development workshops and to facilitate interdisciplinary interactions by providing opportunity for students to meet at academic and social events. Whether you wish to pursue a career in academia, industry or something else, professional skills development training will improve your personal impact and will help you to become a productive and successful researcher.

Professional development courses for Master’s students are called “Masterclasses” and they cover a range of themes, for example, presentation skills, academic writing and leadership skills (http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters/). All Masterclasses are free of charge to Imperial Master’s students and I would encourage you to take as many as you can to supplement your academic training. The Graduate School works closely with the Graduate Students’ Union (GSU) and is keen to respond to student needs so if there is an area of development training, or an activity that you would like us to offer, but which is not currently provided, please do get in touch (graduate.school@imperial.ac.uk).

Dr Janet De Wilde, Head of Postgraduate Professional Development

I would like to welcome you to the Graduate School programme for postgraduate professional development. Our team of tutors come from a wide variety of experiences and we understand just how important it is to develop professional skills whilst undertaking postgraduate studies and research. Not only will this development improve success during your time at Imperial College, but it will also prepare you for your future careers. We are continually working to develop the courses we offer and over this year you will see a range of new courses including face-to-face workshops, interactive webinars and online self-paced courses. I encourage you to explore and engage with the diverse range of opportunities on offer from graduate school and I wish you well in your studies.

Janet De Wilde

The Graduate School also runs a number of exciting social events throughout the year which are an opportunity to broaden your knowledge as well as to meet other students and have fun. You should regularly check the Graduate School’s website and e-Newsletters to keep up to date with all the events and development opportunities available to you.

Finally, I hope that you enjoy your studies here at Imperial, and I wish you well.

Signature
The Graduate School

You automatically become a member of the Graduate School when you register as a postgraduate student at Imperial. The Graduate School has been set up to support all postgraduate students at the College through:

- Training and development courses
- Networking activities, social and academic events to encourage cross-disciplinary interactions
- Forums to represent the views of postgraduate students throughout the College

‘Masterclass’ professional skills courses

You can see the full range of free professional skills courses for postgraduate students on the Graduate School website:

www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters

All courses can be booked online.

Contact us

Level 3, Sherfield Building, South Kensington Campus
020 7594 1383
graduate.school@imperial.ac.uk
www.imperial.ac.uk/graduate-school
Welcome from the Graduate Students’ Union (GSU)

I am delighted to welcome you to Imperial College! Let me introduce you to the Graduate Students’ Union (GSU). We are the representative body defending your interests as a postgraduate student in major decisions taken by the College. Beyond that, we work towards building a thriving postgraduate community that spans faculties and where students effectively communicate in an interdisciplinary way. Our committee is comprised of motivated postgraduate students like yourself, who have been appointed in university-wide elections and volunteer to make your experience at Imperial as fulfilling and enjoyable as possible.

So, what are we up to for this coming year 2018/19? We are going to focus on three major areas of action:

- Continue improving post-graduate well-being by increasing the quality of supervision and by creating strategies to tackle common mental health challenges in higher education.
- Develop the GSU to become central to the postgraduate community by improving the two-way flow of information, between the GSU and you.
- Organise exciting events around the topics of well-being, interdisciplinary research, and entrepreneurship.

As the GSU president, I would like to emphasise that Imperial College London is relying on its postgraduate students to maintain its position as a front-runner in world-class research and teaching. For us, the GSU, to be successful we need to receive as much of your input as possible. We want to work with you, for you!

Finally, I hope that you have a fantastic time here at Imperial and take advantage of the richness of opportunities that awaits you. If ever you have questions or ideas to share with us, please do not hesitate to get in touch with us and we are looking forward to seeing you at our events!

Ute Thiermann, GSU President 2018/19

gsu.president@imperial.ac.uk
Welcome from the Head of Department

I am delighted to welcome you to the Department of Bioengineering at Imperial College London, and to congratulate you on gaining admission to Imperial. You have made a wise choice: Imperial is an outstanding university, and bioengineering is an exciting field that has a great future; bioengineering is the one field of engineering where engineers directly work to make sure people are fit and well, to maintain health, and to help manage ageing; this will never “go out of fashion” and can only grow as technology drives ever-stronger links between engineering, medicine, and the life sciences. The Department of Bioengineering has a history that goes back to the 1960s, and yet we are very focussed on the future of this new and fast-developing field of engineering. I hope that you will be energised by the excitement within the Department as we educate the leaders of tomorrow (that’s you!) and advance the frontiers of knowledge in this area.

Of course, university is about more than just the formal curriculum: here you will form lasting friendships and develop interests that will persist long after you have left Imperial. I hope that you will sample all that the Department and College have to offer outside the classroom, whether that be sports, student union, student clubs or volunteering opportunities. On behalf of the Department, I wish you all the best during your studies here.

Professor Anthony Bull

Head of Department

September 2018
Welcome from Departmental Student Representative

Welcome!

Welcome to the place of innovation, where science-fiction meets science and reality. Welcome to the place, where the applications mathematics and physics can save lives. Welcome to the place with the best departmental music band in the world… welcome to the Department of Bioengineering at Imperial College London!

I am Miro and I am your Departmental Representative. That means that my job is to help you to make your time at Imperial one of the best experiences in your life. And how will I accomplish this? Well, I will make sure that all of us can have a say into how things are run here and that students’ opinions are always heard, reflected and respected.

I will be here to represent on your behalf at various levels across the College, from the Departmental Teaching Committee, to the College Education Representation Boards. Along with my colleagues (year representatives that you will soon elect) we will be discussing a variety of issues during the Staff-Student Committee meetings, we will be talking with external examiners, and doing many other things to represent your voice.

Having been a Dep Rep last year and a Year Rep for two years, I can confirm that your voice and opinions really matter! We have been able to achieve many positive improvements through constructive discussion with staff members. These can range from addition of a new microwave in the RSM Café to the changes in course structures. Therefore, no matter how tiny your issue is, do not hesitate to let me or your Year Reps know. Even small suggestions can lead to significant developments and will allow us to keep our reputation as one of the best Bioengineering departments in the world – and not only academically! Furthermore, we have a College-wide curriculum assessment ahead of us, and all your comments and thoughts will be immensely helpful and appreciated.

I could give you many practical tips regarding student lifehacks, academic tips or the best places to get coffee on campus, all accompanied with good stories from our daily life here. But why not to hear all these from me in person? Seriously, this leads me to the most important thing – do not ever hesitate to talk to your Year Reps or to talk to me – I will be here for you, ready to talk or to go for a coffee (I drink loads of it, so I can drink it with you as well 😊). And never forget that we have awesome staff members and lecturers here at Department of Bioengineering, so never be afraid to speak with them!

In a short time, some of you will work for big companies, some will start their own, and some of you will become famous researchers. However, I hope that all of you will always keep the time you spent at Imperial in your memory as one of your best experiences and I am ready to help you with that!

And now enough talking and let’s start the new academic year!

Miro

Miroslav Gasparek

Department of Bioengineering Student Representative
Welcome from the Imperial College Bioengineering Society

Welcome!

Undergraduate degree, check. Postgraduate degree, loading... As a postgraduate student, you have a challenging year ahead, which may include research, but are you ready for what’s to come? Of course! Having surpassed all undergraduate challenges, your enhanced problem solving skills and grit will keep you moving forward. Therefore, it is a great privilege for the ICBE committee to welcome you into our Bioengineering department!

To know more about us, read on 😊

But before the fun stuff, a bit of history and formalities:

ICBE is a constituent society of the Imperial College Union (ICU) and is under the wing of the City and Guilds College Union (CGCU). Since the society was established just over a decade ago by a group of enthusiastic MSc students, ICBE has been run with the aim of broadening the experiences of Bioengineering students beyond that of the curriculum. Are you an undergraduate (MEng) or postgraduate (MSc, MRes, PhD) student? In that case, then you are a member of ICBE!

As your Departmental Society, ICBE organises and executes the socials, careers fair, trips and networking opportunities for you to grow as a Bioengineer at Imperial, but also to enjoy your time here as a student! Everyone in the committee chose to volunteer and serve all other Bioengineering students by offering these opportunities to you, and we hope that you will find value in all the events that you attend.

Now here’s the fun stuff:

Did you hear Christmas Dinner, networking with entrepreneurs and getting internship advice? Then you heard right! ICBE organises yearly Christmas Dinners and subsidized trips to other cities (in the past: Bristol, Brighton). Besides socials, you will have the opportunity of hearing from your fellow Bioengineers, who will share their summer internship or research experiences, or from biotech start-up CEOs and senior entrepreneurs, whom you will also have the opportunity of networking with!

Over the last two years, ICBE has co-organised a 2-day IC HealthHack, the only Imperial hackathon that focused on the creation of software and hardware solutions to healthcare problems. You too will have the opportunity to take part in the next hackathon we organise and further develop your technical skills!

Is there anything else you would like to see? Then please contact us (see email below) or anyone in the committee about your idea and we will consider if your idea will benefit you and your peers.

But for now, the ICBE committee genuinely wishes you a great year ahead at the Department of Bioengineering and that you grow as a Bioengineer at Imperial!

To keep up to date with our upcoming events or to contact us, see the links below:

Email: bgsoc@ic.ac.uk
LinkedIn page: http://bit.ly/icbe-linked-in
Website: https://www.icbe.co.uk/
Using this handbook

The handbook contains very important information for your academic life, and also for your life at Imperial College London outside of work. You should read the handbook as soon as possible after you receive it so that if an issue arises, you know what action to take, or at least know that the information on what action to take is available to you.

You will be issued with a copy of the handbook for your programme and year of study in week one of autumn term, and you will also be able to access the PDF document online from the Current postgraduate students page of the Department of Bioengineering website.

Information specific to each year of each programme is included in the relevant handbook, and information is updated annually, so it is important you read the relevant handbook at the start of each year of study you undertake with us.

Included in this handbook is essential information about:

- What to do if you run into difficulties affecting your academic life;
- What to do if you run into difficulties in your personal life, such as illness;
- Departmental and College contacts and resources available to you;
- The structure and content of your degree programme and year of study.

There are a number of other important sources of information from the Department, and we would encourage you to make use of these:

Useful links, module descriptors, timetable information and year-specific information can be accessed via the Current postgraduate students page on the Department of Bioengineering webpages, at http://www.imperial.ac.uk/bioengineering/admin/current-pgt/.

There is an information board outside the Student Study Room (3.06 RSM)

Important information will be communicated to you via email, so please ensure you check your College email address regularly.
**Key academic staff**

**Professor Anthony Bull**
Head of Department
Professor of Musculoskeletal Mechanics
PA: Ms Angela Glyes
a.glyes@imperial.ac.uk

**Professor Martyn Boutelle**
Deputy Head of Department and Director of Courses
Professor of Biomedical Sensors Engineering
m.boutelle@imperial.ac.uk

**Dr Anil Bharath**
Reader in Image Analysis
a.bharath@imperial.ac.uk

**Dr Niamh Nowlan**
Director of Postgraduate Studies (Taught)
Senior Lecturer
n.nowlan@imperial.ac.uk

**Professor Manos Drakakis**
Senior Tutor
Professor of Bio-Circuits and Systems
e.drakakis@imperial.ac.uk

**Dr Claire Higgins**
Deputy Senior Tutor
Lecturer
c.higgins@imperial.ac.uk
Dr Spyros Masouros  
Senior Lecturer  
Projects Officer  

s.masouros04@imperial.ac.uk

Dr Tom Ellis  
Reader  
Postgraduate Tutor  

t.ellis@imperial.ac.uk

Key administrative staff

Ms Louise O’Sullivan  
Head of Student Programmes  

+44 (0)20 7594 9660  
l.osullivan@imperial.ac.uk

Mr Martin Holloway  
Academic Tutor  

+44 (0)20 7594 5176  
m.holloway@imperial.ac.uk

Ms Rebecca Pointer  
Student Programmes Manager  

+44 (0)20 7594 5122  
r.pointer@imperial.ac.uk

Ms Maddi O’Brien  
Programmes Development Manager  

+44 (0)20 7594 9296  
m.obrien@imperial.ac.uk

Ms Samantha Kemp  
Student Administrator  

+44 (0)20 7594 9115  
samantha.kemp@imperial.ac.uk
Ms Daze Osuide  
Student Administrator  
+44 (0)20 7594 40717  
d.osuide@imperial.ac.uk

Ms Emily Jackson  
Student Administrator  
+44 (0)20 7594 48157  
emily.jackson@imperial.ac.uk

Mr Adrian Roye  
Senior Student Administrator (Admissions)  
+44 (0)20 7594 2259  
a.roye@imperial.ac.uk

Mr Robert Ferguson  
Industrial Liaison Manager  
+44 (0)20 7594 6371  
robert.ferguson@imperial.ac.uk

Ms Kemi Aofolaju  
Communications and Events Officer  
+44 (0)20 7594 5179  
a.aofolaju@imperial.ac.uk

Mr Ken Keating  
Laboratory Manager  
+44 (0)20 7594 5170  
k.keating@imperial.ac.uk
Important procedures

From time to time unfortunate events can happen and so it is important that you are familiar with these procedures, so that you know who to contact and what to do in case of an emergency or serious problems.

1. If there is any fire, medical or security emergency:

In an emergency, dial extension 4444 from any internal phone or 020 7589 1000. This line is supported 24 hours a day. State your exact location, your name and extension number. Security Control will immediately mobilise the required emergency services. Do not ring 999 – Security will coordinate this to ensure that the emergency services gain site access.

If you discover a fire, immediately press the nearest red alarm call point. Warn people in the vicinity. Evacuate the building and be ready to tell Security and Fire Officers where the fire is.

Read more about our Health and Safety procedures in Section 12 on Health and Safety.

2. If you are ill and think you may miss an exam or assessment deadline:

You should do both of the following:

1. Immediately contact the Department via one of the below channels:
   
i. Student Office: Ms Maddi O’Brien: +44 (0)20 7594 9296 (m.obrien@imperial.ac.uk),
   Rebecca Pointer: +44 (0)20 7594 5122 (r.pointer@imperial.ac.uk) or one of the Student Administrators
   
   ii. Senior Tutor : Professor Manos Drakakis : +44 (0)20 7594 5182 (e.drakakis@imperial.ac.uk)
   
   iii. Academic Tutor: Mr Martin Holloway: +44 (0)20 7594 5176 (m.holloway@imperial.ac.uk)

2. Contact a registered medical doctor as soon as possible for an examination - they are the only people who can pronounce that you are medically unfit to take an exam.
   
i. You must follow the mitigation procedure and it is vital that you obtain a medical certificate from a registered doctor. This is necessary to support your mitigation request.
   
   ii. We highly recommend that you obtain a medical certificate by contacting the Imperial College Health Centre - they are equipped to help in this situation, and if you attend as soon as you can after 8.30am, stating that you have an exam, they will make sure that you get seen quickly.
      • Imperial College Health Centre: +44 (0)20 7584 6301 (imperialcollege.hc@nhs.net)

3. If you, or a friend, are/is suffering stress or depression:

   a. If at all possible, contact someone in the Department such as your Personal Tutor, the Senior Tutor or the Academic Tutor:
      Senior Tutor: Professor Manos Drakakis: +44 (0)20 7594 5182 (e.drakakis@imperial.ac.uk)
      Academic Tutor: Mr Martin Holloway: +44 (0)20 7594 5176 (m.holloway@imperial.ac.uk)

   b. Contact the Health Centre (details above) or the Student Counselling Service:
      +44(0)20 7594 9637 (counselling@imperial.ac.uk)

   c. The Student Space website has lots of useful information on dealing with stress, and where to find additional help and support: http://www.imperial.ac.uk/student-space/

4. Illness, absence, or inability to submit coursework

   a. If you have to be absent through illness or for any other personal reasons, you must let the Student Office (details above) know as soon as possible. If you are likely to miss a coursework, lab or exam deadline, please see ensure you contact the Student Office without delay.

   b. It is important that you familiarise yourself with the information about absences in Section 2, ‘Attendance and absence’.
**English language requirement**

If you are not a native English speaker you must meet the College’s English language requirements.

See the Admissions website for details:

- [www.imperial.ac.uk/study/pg/apply/requirements/english](http://www.imperial.ac.uk/study/pg/apply/requirements/english)

For information on English language support available while you’re here, see the Centre for Academic English’s website:

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

**Attendance and absence**

You are expected to be in attendance from the first day of each term to the last day of each term. You can view the term dates online at: [http://www3.imperial.ac.uk/registry/information/termdates](http://www3.imperial.ac.uk/registry/information/termdates).

You must maintain regular attendance and make acceptable academic progress. While you are responsible for your own learning, there is an expectation that you will take full advantage of the learning opportunities provided, attending all timetabled sessions of the degree programme.

You must inform the Department if you are absent from the College for more than three days during term. This is best done by contacting the Student Office, or the Senior Tutor. If the absence is due to illness you must produce a medical certificate after seven days. If you miss an examination through illness you must contact us immediately, and follow the instructions in the Mitigation section.

The Registry will be informed of all student non-attendances as the College is obliged to report the non-attendance of students on Tier 4 visas to the Home Office.

Should you choose to absent yourself from the degree programme without authorisation you should be aware that you are missing valuable teaching experience which you will need to prepare fully for future examinations. This might mean that you find yourself in a situation where you are in danger of being required to withdraw from the degree programme because of examination failure.

The Student Office keeps students’ attendance under constant review and may warn them if they feel it is inadequate. Problems of non-attendance will be reported to the Director of Courses and Postgraduate Tutor who will inform Personal Tutors and together will make recommendations on any remedial action that might be appropriate.

In the event of there being insufficient improvement following a warning, the Director of Courses or the Postgraduate Tutor may, at their discretion and following investigation, require the student to repeat part of the degree programme; or, should they decide that the student’s academic record and/or application is inadequate or that the student is unable to profit from continuing the programme, they may require the student to withdraw. Students have the right of appeal.

**Holidays**

You are expected to be in College during term time. Timetables for our programmes include breaks at Christmas, Easter, and in the summer (for UG students – PG students are expected to work on projects over the summer).

**Absence due to illness**

If you are absent from the College due to illness for more than two consecutive days, the following procedure must be followed:

1. Inform the Student Office that you are absent through illness as soon as possible in person, by telephone on +44 (0)20 7594 5122 or +44 (0)20 7594 9296. If that is not possible, then send an email as soon as possible to a Student Administrator.

2. If you have been absent for more than five consecutive working days, documentary evidence should be obtained and submitted - e.g. an official doctor's certificate. The documentation, should be submitted to the Student Office except in the case where additional confidentiality is essential, in which case it should be
submitted to the Senior Tutor or Deputy Senior Tutor, and the Student Office should be notified that it has been submitted.

Students who receive a grant and who are absent due to illness for more than 14 days must inform their Local Education Authority; if a student is too ill to do this the information should be sent by the parent or next-of-kin. Illness can only be taken into account in assessing the significance of poor attendance, work or examination results if the illness has been reported at the time it happened to the student’s doctor, and a medical certificate submitted to the Department.

Special or Compassionate Leave

If it is necessary for you to be absent from the College for any reason other than personal illness, permission must be sought from the Department, via the appropriate form available on our website at http://www.imperial.ac.uk/bioengineering/admin/current-pgt/.

This might include a period of absence if you have suffered a close family bereavement, or wish to participate in a major cultural or sporting event.

This request form must be submitted along with any evidence to the Student Office in advance of the absence, leaving enough time for it to be considered and a decision made on whether the absence is accepted or not.

Requests should normally be submitted in writing using the form.

In urgent circumstances where the following criteria are met, approval may be given following a telephone call to the Student Office in the Department on +44 (0)20 7594 5122 or +44 (0)20 7594 5176:

- Absence is necessary at very short notice (e.g. in the case of a close family bereavement), and;
- There is a strong precedent for approval to be given, (e.g. family bereavement)
- The period of absence will be less than three days.

The procedure for submission of an absence request is as follows:-

1. Inform the Student Office that a leave of absence is being requested as soon as possible in person, by telephone +44 (0)20 7594 5122/020 7594 9296 or if that is not possible then by email to: r.pointer@imperial.ac.uk and m.obrien@imperial.ac.uk.
2. Any documentary proof of the reasons for absence should be obtained.
3. Complete and submit, as soon as possible, the form and documentary proof requesting leave of absence. The form should be submitted to the Student Office except in the case where additional confidentiality is essential, in which case it should be submitted to the Senior Tutor or Deputy Senior Tutor, and the Student Office should be notified that it has been submitted.
4. The request will be considered and the student will be informed as soon as possible whether the request has been accepted or not. Absence taken without acceptance of the request may lead to disciplinary measures.

Interruption of Studies

If you should experience a personal emergency or other circumstances arise which necessitate a break in your degree programme, you may need to apply for an interruption of studies (IOS). This is like pressing a pause button on your degree. This will effectively suspend your registration until you are able to return to College. No fees are payable during such a period. If you think you need to apply for an interruption, you should contact your Personal Tutor in the first instance and then the Student Office (RSM 3.21c), who can arrange the paperwork and explain how IOS works.

Student Records

Details relating to unsatisfactory attendance may be placed on a student’s confidential file and made available to Personal Tutors, taken into consideration by and at the discretion of Boards of Examiners, and used as evidence in cases of student appeals and complaints.
**Who to speak to if you need help**

There are a lot of people and resources in place to support you during your time at Imperial College London. Don’t suffer in silence - we take the welfare of our students very seriously indeed and will try to provide all the help that we can if you encounter problems of any sort. If we can’t help directly, then we will direct you to someone who can.

Contacts in the Department of Bioengineering

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<tr>
<th>Who</th>
<th>What can they help with</th>
<th>How to contact them</th>
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<tbody>
<tr>
<td><strong>Personal Tutor</strong></td>
<td>Academic issues</td>
<td>You will be told who your Personal Tutor is. The best way to contact them is via email to arrange a meeting.</td>
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<td>Personal matters</td>
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<td><strong>Senior Tutor:</strong></td>
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<tr>
<td>Professor Manos Drakakis</td>
<td>Academic issues</td>
<td><a href="mailto:e.drakakis@imperial.ac.uk">e.drakakis@imperial.ac.uk</a></td>
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<td></td>
<td>Personal matters</td>
<td>+44 (0) 20 7594 5182</td>
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<td><strong>Academic Tutor:</strong></td>
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<tr>
<td>Mr Martin Holloway</td>
<td>Academic issues</td>
<td><a href="mailto:m.holloway@imperial.ac.uk">m.holloway@imperial.ac.uk</a></td>
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<td>Personal matters</td>
<td>+44 (0) 20 7594 5176</td>
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<td><strong>The Student Office</strong></td>
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<tr>
<td>Ms Louise O’Sullivan</td>
<td>The Student Office can help with: Timetabling, Teaching</td>
<td><a href="mailto:l.osullivan@imperial.ac.uk">l.osullivan@imperial.ac.uk</a></td>
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<td>policies and procedures,</td>
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<td>Illness and absences,</td>
<td>+44 (0)20 7594 9660</td>
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<td>Interruption of studies,</td>
<td><a href="mailto:r.pointer@imperial.ac.uk">r.pointer@imperial.ac.uk</a></td>
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<td>Mitigating circumstances,</td>
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<td>Admissions, Programme administration, Examinations</td>
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<td>Ms Rebecca Pointer</td>
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<td>Ms Maddi O’Brien</td>
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<td>Ms Samantha Kemp</td>
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<td>Ms Daze Osuide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms Emily Jackson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr Adrian Roye</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Department Disability</strong></td>
<td>Disabilities and additional support</td>
<td><a href="mailto:bg-ddo@imperial.ac.uk">bg-ddo@imperial.ac.uk</a></td>
</tr>
<tr>
<td><strong>Officer:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms Louise O’Sullivan</td>
<td></td>
<td>+44 (0) 20 7594 6373</td>
</tr>
<tr>
<td><strong>Industrial Liaison</strong></td>
<td>Industrial placements</td>
<td><a href="mailto:robert.ferguson@imperial.ac.uk">robert.ferguson@imperial.ac.uk</a></td>
</tr>
<tr>
<td><strong>Manager:</strong></td>
<td>Networking, contacts and careers</td>
<td></td>
</tr>
<tr>
<td>Mr Robert Ferguson</td>
<td></td>
<td>+44 (0) 20 7594 6371</td>
</tr>
<tr>
<td><strong>Bioengineering</strong></td>
<td>Referencing and reference management software,</td>
<td><a href="mailto:e.zazani@imperial.ac.uk">e.zazani@imperial.ac.uk</a></td>
</tr>
<tr>
<td><strong>Librarian:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+44 (0)20 7594 8880</td>
</tr>
</tbody>
</table>
Outside the Department, the College provides extensive student support services.

<table>
<thead>
<tr>
<th>Resource</th>
<th>What sort of help is available?</th>
<th>Contact details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Student Space website</strong></td>
<td>Lots of helpful information and resources to help you live life well.</td>
<td><a href="http://www.imperial.ac.uk/student-space/">http://www.imperial.ac.uk/student-space/</a></td>
</tr>
<tr>
<td><strong>College tutors</strong></td>
<td>Confidential support for students, independent of your academic department, where you can discuss academic issues and all aspects of pastoral care.</td>
<td><a href="http://www.imperial.ac.uk/personal-tutors-guide/understanding-your-role/your-senior-tutor/">http://www.imperial.ac.uk/personal-tutors-guide/understanding-your-role/your-senior-tutor/</a></td>
</tr>
<tr>
<td><strong>Imperial College Security</strong></td>
<td>In case of any kind of fire, medical emergency, or threat, contact Security immediately.</td>
<td><a href="mailto:security.control@imperial.ac.uk">security.control@imperial.ac.uk</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+44 (0)20 7589 1000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dial 4444 from any internal telephone.</td>
</tr>
<tr>
<td><strong>Imperial College Health Centre</strong></td>
<td>Doctors and nurses are available to provide care for a range of medical and psychological problems.</td>
<td><a href="mailto:imperialcollege.hc@nhs.net">imperialcollege.hc@nhs.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+44 (0)20 7584 6301</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.imperialcollegehealthcentre.co.uk">http://www.imperialcollegehealthcentre.co.uk</a></td>
</tr>
<tr>
<td><strong>Student Counselling Service</strong></td>
<td>Free and confidential short-term counselling is available to all students, to discuss any personal issue.</td>
<td><a href="http://www.imperial.ac.uk/counselling/">http://www.imperial.ac.uk/counselling/</a></td>
</tr>
<tr>
<td><strong>Student Hub</strong></td>
<td>Advice and information on a wide range of topics, including admissions, finance, accommodation, exchange programmes and documentation.</td>
<td><a href="http://www.imperial.ac.uk/student-hub/">http://www.imperial.ac.uk/student-hub/</a></td>
</tr>
<tr>
<td><strong>International Student Support</strong></td>
<td>General international student support, information on visas and immigration and the Academic Technology Approval Scheme (ATAS).</td>
<td><a href="https://www.imperial.ac.uk/study/international-students/">https://www.imperial.ac.uk/study/international-students/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+44 (0) 20 7594 8040</td>
</tr>
<tr>
<td><strong>Chaplaincy</strong></td>
<td>Chaplains and Faith Advisors from different faith backgrounds provide confidential support on personal and religious issues.</td>
<td><a href="http://www.imperial.ac.uk/chaplaincy/">http://www.imperial.ac.uk/chaplaincy/</a></td>
</tr>
<tr>
<td><strong>Centre for Academic English</strong></td>
<td>The Centre offers programmes, workshops, and other resources to help students develop their academic language and literacy.</td>
<td><a href="http://www.imperial.ac.uk/academic-english">http://www.imperial.ac.uk/academic-english</a></td>
</tr>
<tr>
<td><strong>Imperial College Union Advice Centre</strong></td>
<td>The Advice Centre is your first port of call if you are experiencing difficulties during your time at university.</td>
<td><a href="https://www.imperialcollegeunion.org/advice">https://www.imperialcollegeunion.org/advice</a></td>
</tr>
<tr>
<td><strong>Imperial College Success Guides</strong></td>
<td>Advice on developing the skills that you will need to help you through your degree.</td>
<td><a href="http://www.imperial.ac.uk/students/success-guide/">http://www.imperial.ac.uk/students/success-guide/</a></td>
</tr>
<tr>
<td><strong>Careers Service</strong></td>
<td>The Careers Service provides information on work placements, job opportunities, further study and careers advice.</td>
<td><a href="http://www.imperial.ac.uk/careers">http://www.imperial.ac.uk/careers</a></td>
</tr>
</tbody>
</table>
### Key dates 2018-19

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01 October – 05 October 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>2</td>
<td>08 October – 12 October 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>3</td>
<td>15 October – 19 October 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>4</td>
<td>22 October – 26 October 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>5</td>
<td>29 October – 02 November 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>6</td>
<td>05 November – 09 November 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>7</td>
<td>12 November – 16 November 2018 Reading week</td>
<td>Autumn</td>
</tr>
<tr>
<td>8</td>
<td>19 November – 23 November 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>9</td>
<td>26 November – 30 November 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>10</td>
<td>03 December – 07 December 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>11</td>
<td>10 December – 14 December 2018</td>
<td>Autumn</td>
</tr>
<tr>
<td>12</td>
<td>17 December – 21 December 2018</td>
<td>Christmas</td>
</tr>
<tr>
<td>13</td>
<td>24 December – 28 December 2018</td>
<td>Christmas</td>
</tr>
<tr>
<td>14</td>
<td>31 December 2018 – 04 January 2019</td>
<td>Christmas</td>
</tr>
<tr>
<td>1 (15)</td>
<td>07 January – 11 January 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>2 (16)</td>
<td>14 January – 18 January 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>3 (17)</td>
<td>21 January – 25 January 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>4 (18)</td>
<td>28 January – 01 February 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>5 (19)</td>
<td>04 February – 08 February 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>6 (20)</td>
<td>11 February – 15 February 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>7 (21)</td>
<td>18 February – 22 February 2019 Reading week</td>
<td>Spring</td>
</tr>
<tr>
<td>8 (22)</td>
<td>25 February – 01 March 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>9 (23)</td>
<td>04 March – 08 March 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>10 (24)</td>
<td>11 March – 15 March 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>11 (25)</td>
<td>18 March – 22 March 2019</td>
<td>Spring</td>
</tr>
<tr>
<td>12 (26)</td>
<td>25 March – 29 March 2019</td>
<td>Easter</td>
</tr>
<tr>
<td>13 (27)</td>
<td>01 April – 05 April 2019</td>
<td>Easter</td>
</tr>
<tr>
<td>14 (28)</td>
<td>08 April – 12 April 2019</td>
<td>Easter</td>
</tr>
<tr>
<td>15 (29)</td>
<td>15 April – 19 April 2019</td>
<td>Easter</td>
</tr>
<tr>
<td>16 (30)</td>
<td>22 April – 26 April 2019</td>
<td>Easter</td>
</tr>
<tr>
<td>1 (31)</td>
<td>29 April – 03 May 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>2 (32)</td>
<td>06 May – 10 May 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>3 (33)</td>
<td>13 May – 17 May 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>4 (34)</td>
<td>20 May – 24 May 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>5 (35)</td>
<td>27 May – 31 May 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>6 (36)</td>
<td>03 June – 07 June 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>7 (37)</td>
<td>10 June – 14 June 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>8 (38)</td>
<td>17 June – 21 June 2019</td>
<td>Summer</td>
</tr>
<tr>
<td>9 (39)</td>
<td>24 June – 28 June 2019</td>
<td>Summer</td>
</tr>
</tbody>
</table>

### Bank holidays

<table>
<thead>
<tr>
<th>Date</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christmas Day</td>
<td>25 December 2018</td>
</tr>
<tr>
<td>Boxing Day</td>
<td>26 December 2018</td>
</tr>
<tr>
<td>New Year's Day</td>
<td>01 January 2019</td>
</tr>
<tr>
<td>Good Friday</td>
<td>19 April 2019</td>
</tr>
<tr>
<td>Easter Monday</td>
<td>22 April 2019</td>
</tr>
<tr>
<td>Early May Bank Holiday</td>
<td>06 May 2019</td>
</tr>
<tr>
<td>Spring Bank Holiday</td>
<td>27 May 2019</td>
</tr>
<tr>
<td>Summer Bank Holiday</td>
<td>26 August 2019</td>
</tr>
</tbody>
</table>

### Term dates

<table>
<thead>
<tr>
<th>Term</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn</td>
<td>Saturday 29 September 2018 – Friday 14 December 2018</td>
</tr>
<tr>
<td>Spring</td>
<td>Saturday 5 January 2019 – Friday 22 March 2019</td>
</tr>
<tr>
<td>Summer</td>
<td>Saturday 27 April 2019 – Friday 29 June 2019</td>
</tr>
</tbody>
</table>

### College closures

<table>
<thead>
<tr>
<th>Date</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christmas</td>
<td>Saturday 22 December 2018 – Tuesday 1 January 2019 (Inclusive)</td>
</tr>
<tr>
<td>Easter</td>
<td>Thursday 18 April 2019 – Tuesday 23 April 2019 (Inclusive)</td>
</tr>
</tbody>
</table>

### Graduation ceremonies

Please see website - http://www.imperial.ac.uk/graduation/

You can also find useful information about key dates on the following websites:

- [http://www.imperial.ac.uk/admin-services/secretariat/information-for-staff/college-year-card/](http://www.imperial.ac.uk/admin-services/secretariat/information-for-staff/college-year-card/)
- [http://www.imperial.ac.uk/admin-services/registry/term-dates/](http://www.imperial.ac.uk/admin-services/registry/term-dates/)
3. Programme information

Your student journey
As a taught postgraduate, you’ve already spent a significant amount of time at university, whether here at Imperial College London or elsewhere. Congratulations on your achievements so far; you’ve joined the leading Department for Bioengineering in the UK, at one of the best universities in the world. Your programme of study in Biomedical Engineering will be complemented by a comprehensive programme of professional development, delivered by Imperial’s Graduate School. This is a critical part of postgraduate study at Imperial. It includes over 100 free professional development courses to enable you to continually develop as a researcher and gain skills that will benefit your career.

You will all have a different journey, and different experiences during your time at Imperial. In the Department you will find many of your fellow students are studying on different programmes. This will be very beneficial for you in developing an interdisciplinary outlook, as it offers opportunities to engage with colleagues who specialise in different areas and have different background knowledge.

Bear in mind that some things at Imperial may be very different to previous institutions at which you may have studied. It is best not to make assumptions about rules and what you have to do—always ask your Module Leader, Personal Tutor, the Academic Tutor, or the Student Office if you’re not sure of something.

We hope that you will find the Department of Bioengineering to be a lively, inspiring place. As you know, university students are expected to take responsibility for their own learning and welfare, but there are lots of people and resources in place to support you, so please do make the most of them and ask for help or information if you need it.

As a student of the MSc Biomedical Engineering programme, you will gain technical knowledge, expertise and transferable skills in this exciting area. Many of our students come from other traditional engineering and physical science backgrounds such as Mechanical Engineering, Electrical and Electronic Engineering and Physics. The programme is designed to provide core material for all students, and then opportunities to specialise in a ‘stream’. The streams of the MSc Biomedical Engineering programme are:

- Biomechanics
- Biomaterials
- Medical Physics
- Neurotechnology

You may have moved from another university to attend Imperial College London, or perhaps you’ve moved internationally. It can take some time to adapt to the changes and you may feel overwhelmed. We understand this and would recommend that you get involved with Departmental life and also explore some of the clubs and societies outside of your academic area. London is a fantastic city so make sure you do some exploring as well.

Later in the handbook, there is a list of people and resources which you may find useful throughout your degree. We’ve also produced a Welcome Guide for you, which covers a lot of the information you’ll need as a brand new student here, so make sure you read that as well as this handbook.
Overview of programme
The MSc Biomedical Engineering programme provides students with technical knowledge, expertise and transferable skills in bioengineering. The programme is split into four streams to allow students to specialise in an area of interest.

All streams are modular, consisting of a core and options. The core material is largely common between the streams, but the options differ. It is necessary for applicants to choose the most suitable stream at the time of applying. All four streams lead to the award of the MSc in Biomedical Engineering and can be studied on a full-time basis. The following streams are available:

Biomechanics
The Biomechanics stream is focused on bioengineering problems related to major diseases associated with an ageing population, such as cardiovascular disease, glaucoma and bone and joint disease. These are major causes of mortality and morbidity and this stream prepares engineers for a career in these key growth areas.

Biomaterials
The Biomaterials stream is offered jointly with the Department of Materials. It addresses the selection and use of biomaterials in medical and surgical devices, including their application, properties, interaction with tissues and drawbacks. Existing and new biomaterials are studied, including bioactive and biodegradable materials, implants and dental materials. Modules also cover the development of materials for new applications, the response of cells and the design of materials as scaffolds for tissue engineering, which involves tailoring materials so that they guide stem cells to produce new tissue.

Medical Physics
The Medical Physics stream trains students in the physical understanding required for healthcare and medical research, focusing on human physiology, and the use of radiation in treatment and in clinical imaging, as well as the signal and image processing methods needed for the design and optimal use of such systems in diagnosis and research.

Neurotechnology
The Neurotechnology stream covers the development of new technology for the investigation of brain function, focusing on the application of this to benefit society. For example the development of neuroprosthetic devices, new neuroimaging techniques and developing drugs and robotic assistive devices for those with central nervous system disorders, as well as in biologically-inspired control engineering.
**Programme Learning Outcomes**

The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: [www.imperial.ac.uk/students/academic-support/graduate-attributes](http://www.imperial.ac.uk/students/academic-support/graduate-attributes).

The Learning Outcomes differ slightly for each stream and are detailed below:

<table>
<thead>
<tr>
<th>Biomechanics</th>
<th><strong>Knowledge and Understanding of:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Physiology of organs and cell function taught by lectures and problem classes</td>
</tr>
<tr>
<td></td>
<td>• Signal and image processing techniques taught by lectures and computer laboratory exercises</td>
</tr>
<tr>
<td></td>
<td>• Equipment and techniques to image the human body taught by lectures, group work and visits</td>
</tr>
<tr>
<td></td>
<td>• Equipment and techniques to acquire physiological and chemical information from the human body taught by lectures and laboratory classes</td>
</tr>
</tbody>
</table>

**Intellectual Skills:**

- Brainstorming for identifying hazards (risk analysis exercise)
- Critical review of scientific literature (Journal Club)

**Practical Skills:**

- Ability to perform original research by producing a dissertation
- Ability to perform data and statistical analysis
- Ability to present data (journal club)

**Transferable Skills:**

- Group work
- Initiative
- Critical thinking

<table>
<thead>
<tr>
<th>Biomaterials</th>
<th><strong>Knowledge and Understanding of:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Various components of the human body, their function and the effects of ageing</td>
</tr>
<tr>
<td></td>
<td>• Vascular pathologies: Arteriosclerosis, aneurysms</td>
</tr>
<tr>
<td></td>
<td>• The major classes of biomedical implant materials, their means of fixation, stability and the procedures and physiological principles involved in the replacement of various parts of the body with implants or tissue engineered constructs.</td>
</tr>
<tr>
<td></td>
<td>• Advantages and disadvantages of current implants.</td>
</tr>
<tr>
<td></td>
<td>• The reasons of failure of implants in various clinical applications</td>
</tr>
<tr>
<td></td>
<td>• The relative merits of replacing a body part with a tissue engineering construct</td>
</tr>
<tr>
<td></td>
<td>• Drug delivery devices</td>
</tr>
<tr>
<td></td>
<td>• How devices can be surface modified to improve function</td>
</tr>
<tr>
<td></td>
<td>• Characterisation of material: biomaterial-tissue and biomaterial-cell interfaces</td>
</tr>
<tr>
<td></td>
<td>• Challenges involved with transfer of laboratory inventions to a clinical product</td>
</tr>
</tbody>
</table>

**Intellectual Skills:**

- Brainstorming for identifying hazards (risk analysis exercise)
- Critical review of scientific literature (Journal Club and literature review)

**Practical Skills:**

- Ability to communicate alternative means to repair or replace parts of the body to both healthcare professionals and patients.
- Ability to perform original research by producing a dissertation
- Ability to perform data and statistical analysis
- Ability to present data (journal club)

**Transferable Skills**

- Group work
<table>
<thead>
<tr>
<th>Medical Physics</th>
<th>Knowledge and Understanding of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Human physiology and cell function taught by lectures and problem classes</td>
</tr>
<tr>
<td></td>
<td>Signal and image processing techniques taught by lectures and computer laboratory exercise</td>
</tr>
<tr>
<td></td>
<td>Equipment and techniques to image the human body taught by lectures, group work and visits</td>
</tr>
<tr>
<td></td>
<td>Equipment and techniques to acquire physiological and chemical information from the human body taught by lectures and laboratory classes</td>
</tr>
<tr>
<td></td>
<td>Use of Radiation in therapy and diagnosis taught by lectures.</td>
</tr>
<tr>
<td>Intellectual Skills</td>
<td>Brainstorming for identifying hazards (risk analysis exercise)</td>
</tr>
<tr>
<td></td>
<td>Critical review of scientific literature (Journal Club)</td>
</tr>
<tr>
<td>Practical Skills</td>
<td>Ability to perform original research by producing a dissertation</td>
</tr>
<tr>
<td></td>
<td>Ability to perform data and statistical analysis</td>
</tr>
<tr>
<td></td>
<td>Ability to give presentations</td>
</tr>
<tr>
<td>Transferable Skills</td>
<td>Group work</td>
</tr>
<tr>
<td></td>
<td>Initiative</td>
</tr>
<tr>
<td></td>
<td>Critical thinking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neurotechnology</th>
<th>Knowledge and Understanding of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Systems neuroscience, with particular emphasis on applications of technology to neuroscience, taught by lectures and problem classes</td>
</tr>
<tr>
<td></td>
<td>Signal and image processing techniques taught by lectures and computer laboratory exercise</td>
</tr>
<tr>
<td></td>
<td>Equipment and techniques to image the human body taught by lectures, group work and visits</td>
</tr>
<tr>
<td></td>
<td>Equipment and techniques to acquire physiological and chemical information from the human body taught by lectures and laboratory classes.</td>
</tr>
<tr>
<td>Intellectual Skills</td>
<td>Brainstorming for identifying hazards (risk analysis exercise)</td>
</tr>
<tr>
<td></td>
<td>Critical review of scientific literature (Journal Club)</td>
</tr>
<tr>
<td>Practical Skills</td>
<td>Ability to perform original research by producing a dissertation</td>
</tr>
<tr>
<td></td>
<td>Ability to perform electrophysiological recordings from sensory nerve fibres</td>
</tr>
<tr>
<td></td>
<td>Ability to perform data and statistical analysis</td>
</tr>
<tr>
<td></td>
<td>Ability to present data (journal club)</td>
</tr>
<tr>
<td>Transferable Skills</td>
<td>Group work</td>
</tr>
<tr>
<td></td>
<td>Initiative</td>
</tr>
<tr>
<td></td>
<td>Critical thinking</td>
</tr>
</tbody>
</table>
Programme Structure and organisers

**MSc Biomedical Engineering:** all streams must take the core taught modules:
- Systems Physiology; Statistics and Data Analysis; Journal Club; Medical Device Certification; Biomedical Imaging; and the MSc individual project.

### Compulsory modules – you must select all these modules for your stream

<table>
<thead>
<tr>
<th>Medical Physics</th>
<th>Biomechanics</th>
<th>Neurotechnology</th>
<th>Biomaterials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Physiological Monitoring</td>
<td>Biomechanics</td>
<td>Brain Machine Interfaces</td>
<td>Biomaterials</td>
</tr>
<tr>
<td>Image Processing</td>
<td>Physiological Fluid Mechanics</td>
<td>Mathematical methods for Bioengineers</td>
<td>Advanced Biomaterials</td>
</tr>
<tr>
<td>Molecular and Tissue Imaging</td>
<td>Molecular Cellular and Tissue Biomechanics</td>
<td>Neuroscience</td>
<td>Advanced Tissue Engineering</td>
</tr>
<tr>
<td>Flow Imaging</td>
<td>Orthopaedic Biomechanics</td>
<td>Tissue Engineering and Regenerative Medicine</td>
<td></td>
</tr>
</tbody>
</table>

#### Elective module: you can choose one module from the options given for your stream

<table>
<thead>
<tr>
<th>Choose from:</th>
<th>Choose from:</th>
<th>Choose from:</th>
<th>Choose from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mathematical Methods for Bioengineers</td>
<td>• Cellular and Molecular Mechanotransduction</td>
<td>• Computational Neuroscience</td>
<td>• Biomimetics</td>
</tr>
<tr>
<td>• Engineering in Cancer Therapy</td>
<td>• Biomedical Advanced and Computational Stress Analysis</td>
<td>• Machine Learning and Neural Computation</td>
<td>• Biomechanics</td>
</tr>
<tr>
<td>• Neuroscience.</td>
<td>• Human Neuromechanical Control and Learning</td>
<td>• Hearing and Speech</td>
<td>• Molecular and Tissue Imaging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Human Neuromechanical Control and Learning</td>
<td>• Mathematical Methods for Bioengineers</td>
</tr>
</tbody>
</table>

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**MSc Programme Director**
Dr Niamh Nowlan

**Department of Bioengineering Student Office**

**Medical Physics and Imaging Stream Coordinator**
Dr Robert Dickinson

**Biomechanics and Mechanobiology Stream Coordinator**
Dr Sam Au

**Neurotechnology Stream Coordinator**
Dr Huai-Ti Lin

**Biomaterials and Tissue Engineering Stream Coordinator**
Dr Theoni Georgiou
How the programme will be delivered
You may experience a variety of teaching and learning methods, which combine theory and practice:

- Lectures
- Tutorials
- Study groups
- Laboratory sessions
- Make, build and test activities

You will be expected to work in groups for some modules, which may mean that you have to coordinate meetings around the individual timetable commitments of each group member. This is a valuable skill and good practice for the next stage of your career.

Professional skills development
You will have a number of opportunities throughout the programme to enhance your professional skills: such as working in teams (e.g. in group projects), giving presentations (in some modules and in your individual project); and solving problems. The Department’s Industrial Liaison Manager also runs a number of workshops, networking sessions and seminars to help you hone your skills.

Selecting elective modules
As part of your MSc programme, you are able to choose an elective module. Elective modules may only be chosen within the constraints specified for the relevant year and it should be noted that not all combinations of optional modules may be possible due to timetabling constraints.

In 2018-19 elective module selection will be via the Departmental Student system (DSS), accessible at http://www.imperial.ac.uk/dss.

You must use DSS to select both your compulsory specialist modules and your elective option. Please ensure you select only the modules available within your stream.

Once you have selected your modules on DSS, you will be enrolled in Blackboard. The system refreshes overnight so you may not see the modules appear in Blackboard straight away.

Further instructions on module selection will be provided via email at the start of the academic year. If you have any difficulties or questions please speak to someone in the Student Office.

Timetables
Your timetable will be made available at the beginning of term. The Department publishes year-group timetables online on the following page but students are always advised to consult their own personal timetable in the first instance: http://www.imperial.ac.uk/bioengineering/admin/current-/pgt/programme-administration/

Projects
During your time at Imperial you will work on a number of projects as part of your programme of study. You will be given a Project Handbook which provides you with lots of useful information to help with your project work.

You can find out more about projects on the website at: http://www.imperial.ac.uk/bioengineering/admin/current-/pgt/projects/.

You can find out more about some of the project work previous students have completed on the website at: http://www.imperial.ac.uk/bioengineering/study/student-impact/.

Past MSc project titles from 2015-16
The following are the titles of some projects which were available to MSc students in previous academic years. They are given here to indicate the range of opportunities, and to indicate the material which we have on file and which you may want to consult during your own project. As the
Department evolves, its interests shift and in the coming year the projects on offer will not necessarily be in the same areas as those given here.

**Biomaterials**

<table>
<thead>
<tr>
<th>Hybrid scaffolds for cartilage tissue engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue engineering combines biology and materials engineering principles to regenerate damaged tissue to its original function. Temporary templates (scaffolds) must be developed to guide tissue repair with different mechanical properties depending on the application. For cartilage regeneration, the scaffolds must have mechanical properties mimicking cartilage. Composites are required, but conventional composites will not work. This project will involve the development of new hybrids (nanocomposites) and the tailoring of their properties to match cartilage. The project will be lab based and involve materials chemistry, processing and then characterisation by imaging, degradation studies and mechanical testing. Successful scaffolds will be tested in cell culture.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nanoparticles for Cancer Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small bioactive glass particles can be taken up by cells without them changing cell behaviour. The aim of this project is to develop particles that will be taken up by cancer cells and when they are inside the cancer cells release ions that will kill the tumour cells. The project will be lab based and involve particle synthesis and testing, including imaging and degradation studies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-assembled polymer structures for drug delivery: From spherical and worm-like micelles to polymersomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphiphilic polymers can self-assemble into different types of structures like micelles and polymersomes that are used for drug and gene delivery. Depending on the type/shape of the self-assembled structure the delivery of the drug will be different. In this project an available series of polymers of different molecular weights and compositions will be self-assembled using different fabrication pathways and the structure and shape of the structures will be characterised. We aim to prove that the structure can be tailored and by tailoring the structure the drug delivery can be manipulated.</td>
</tr>
</tbody>
</table>

**Biomechanics**

<table>
<thead>
<tr>
<th>The unconventional fluid mechanics of the eye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqueous humour (AH) drainage from the eye is important for controlling eye pressure, and lowering eye pressure is the only strategy to prevent further blindness in glaucoma. However, we do not completely understand the pathways or mechanisms of AH drainage from the eye. AH drainage may be pressure-dependent or pressure-independent. The latter is important because increasing pressure-independent outflow is how many glaucoma drugs work, but it is unclear how drainage from the eye may be pressure-independent. In this project, the student will develop a model of fluid drainage from the eye, with the aim of determining whether the osmotic resorption into the ocular vasculature is a plausible mechanism for pressure-independent outflow. The project will involve numerical simulation of flow through biological tissues with collapsible vessels and porous media.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lung mechanics in trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>This project will explore how classical measurements of lung function such as compliance/stiffness measurements can highlight respiratory problems. In the area of trauma research, it is understandable that physical injury can result in tissue disruption and alteration at a cellular level. This can have a severe impact on the mechanical response of these areas of damaged and altered tissue. Furthermore in the extreme environments of traumatic injury we can observe distinct architectural changes. This has been shown in the literature with X-Ray imaging. However the threshold for this visible injury is a grey area and</td>
</tr>
</tbody>
</table>
**Medical Physics**

**A tool for analysing primary brain tumour imaging biomarkers**

Quantitative diffusion imaging provides non-invasive biomarkers of brain tumour behaviour. Retrospective diffusion MRI data is available on patients with glioblastoma, a high grade brain tumour. As part of this project you will be responsible for creating MATLAB software that will be able to compute imaging biomarkers from a set of diffusion imaging tumour data. The tool will measure tumour border biomarkers and biomarkers of heterogeneity present in the tumour through histogram analysis. Survival analysis may be conducted on a set of tumour data which is intended to lead to a publication in a peer-reviewed journal.

**Mapping skin temperatures during cooling after surgery**

Cooling of the skin is performed after facial surgery to reduce swelling and aid healing, and there is at least one commercial device available to do this (Hilotherm). We have made some preliminary measurements on the actual temperature distribution produced by this device using a multi-channel thermometer (mainly using off-the-shelf devices) and taking detailed temperature measurements on phantoms and volunteers to establish the temperature distribution. The project involves understanding the best way of making these measurements, and developing a simulation of the temperature field to compare different cooling designs, in particular the depth of cooling. The project is association with Dr Collier at the craniofacial surgery department at the Chelsea and Westminster Hospital.

**Spatial Frequency Domain Imaging Endoscopy**

Spatial frequency domain imaging (SFDI) is a well-established technique to quantify tissue optical properties and can help to discriminate different types of tissue. This could not only help to gain information on the properties of an unknown tissue of interest but also to identify cancerous tissue even when the difference in colour between cancerous and healthy tissue is barely visible. So far, SFDI has been used by various research groups but only to get tissue optical properties postoperative or during open surgeries. However, more and more surgeries are done minimally invasively nowadays, considering the great benefits it has. Due to the predicted high numbers of cancerous diseases for the next 15 years, the need for enhanced cancer management and active cancer treatment urges to optimise existing and develop new technology. Because endoscopic systems transfer images from inside the patient onto a monitor, the opportunity is given to provide the surgeon with additional information about the tissue by overlaying the video with calculated data for example by combining endoscopy with SFDI.

This project will build on a proof-of-principle SFDI endoscope system that is able to acquire data from the abdominal cavity organs. It will involve the design, construction, testing, data acquisition and characterisation of a new endoscopic device.
Neurotechnology

Neural mechanisms for auditory processing
Understanding speech such as in noisy environments is a task at which humans excel. However, the mechanisms by which we achieve this are still largely unexplored. A recent theory is that cortical oscillations help to track speech and differentiate it from background noise.

We will employ electroencephalography (EEG) to measure brain activity in response to custom-designed speech stimuli, in human volunteers. The EEG measurements involve electrodes attached to the scalp with simultaneous presentation of speech in a sound-proof room. The results will be analyzed through advanced methods from signal processing and machine learning.

This project will suit a student with a strong background and interest in human neuroscience as well as in advanced data analytics.

Detection of seizure activity and MADs in TBI patients using Depth electrodes, EEG and other novel methods
This project comes from a long term collaboration with Prof Anthony Strong and his team at King’s College Hospital NHS Trust. In the past we have demonstrated the importance of Spreading depolarisations (SDs) in the development of secondary brain injury in patients who have had a severe traumatic brain injury. This project involves working with the field potential data streams we obtain from out patients. We are looking to examine the role of SDs, seizures and “MADs” in our clinical data sets.

The project will involve visits to the Hospital to see the clinical team together with working with project members in MGB group and Prof Strong’s team. In particular Sharon Jewel, an expert in neurophysiology. The aim will be to generate code in Matlab to allow the automatic detection and quantification of MADs, in relation to SDs and Seizures.

Real-time monitoring of traumatic brain injury patients
Background: We have an on-going grant supported by the Wellcome Trust / Department of Health to build a clinical instrument to monitor traumatic brain injury patients during the 5 day stay they have in the intensive care unit. We monitor brain pressure, brain electrical activity and levels of metabolic markers such as potassium, glucose and lactate to understand the state of the injured brain tissue. We have now built a prototype instrument and will be using it in the intensive care unit of King’s College Hospital.
Aim: To work alongside our monitoring team in the intensive care unit to collect this vital data. To Analyse the data for new patterns of changes indicative of ‘secondary insults to the brain’.
Methods: You will learn how to operate the new clinical instrument in a clinical environment. This will include making microfluidic biosensors. You will analyse this clinical data to find new patterns of changes across the measured variables indicating transient worsening of the brain tissue state. You will then work with our programmers to embed this as an adverse ‘event’ in our data analysis software.

Reading lists
Reading lists for each of your modules can be found online as part of the module descriptors or will be supplied directly by the lecturers. The College Central Library has copies of all the textbooks you will need so there is no need to rush out and buy copies of them! The Department also has a small collection of books which you are welcome to use but you may not take away from the Department.
**Reading week**

Every term, there is a Reading Week, usually Week 7 of term. The Reading Week is free from lectures (but study groups and labs do still take place) and is meant for reading, studying and catching up. The following rules apply to reading week:

1. You are expected to remain present and assessable during Reading Week. The UKVI and College regulations require you, as an enrolled student to be present during term time. Absences are not allowed unless they are necessary and these must be authorised in advance. A request for absence can be made with the appropriate form, available online from [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/).
2. There will be no lectures in Reading Week so you can catch up with learning and also work on coursework or projects.
3. GTA (Graduate Teaching Assistant) led laboratories/practicals and study groups will run during Reading Week so you can continue to get GTA support. Attendance at these labs and study groups is still mandatory.
4. The Reading Weeks apply to Bioengineering modules only. If you take modules in other Departments you will probably have lectures during our Reading Week. Although some Departments also have a Reading Week, it might not be the same week as ours.

**Competency Standards**

The Department’s competency standards can be accessed online at: [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/programme-administration/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/programme-administration/).

**Module Descriptors**

Module descriptors can be found online at: [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/options/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/options/).

**Imperial Mobile app**

Don’t forget to download the free Imperial Mobile app for access to College information and services, including your programme timetable, College emails and a library catalogue search tool.

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

**Imperial Success Guide**

The Imperial Success Guide is an online resource with advice and tips on the transition to Master’s level study. More than just a study guide, it is packed with advice created especially for Imperial Master’s students, including information on support, health and well-being and ideas to help you make the most of London.

[www.imperial.ac.uk/success-guide](http://www.imperial.ac.uk/success-guide)
4. Accreditation

What is a professional engineering qualification?

Engineering is a vocation. A professional qualification demonstrates that you have achieved the highest level of competence for your chosen vocation. Specifically, you have achieved the competencies specified in the Dublin, Sydney and Washington accords. For a professional engineer, an academic qualification is a stepping-stone towards obtaining a professional qualification.

The main professional engineering qualifications in England is the CEng qualification, in Europe it is the Eur Ing and for the rest of the world it is the Int PE. All three qualifications are based on the same aforementioned accords. Each qualification is mutually acceptable to the other organisations that administer professional registration. This means your academic accreditation can be cashed-in for professional registration anywhere in the world.

A professional qualification is effectively an international passport to practice engineering. In some countries a professional engineering qualification is a pre-requisite for employment. In all countries it is a definite advantage since it demonstrates that your work since graduation has been peer reviewed. Thereby, affirming that you have achieved a high-level of professional competency over a period of several years. Affirmation from your peers confirms that you have used your knowledge, understanding and skills in a useful way working as a professional engineer

What is academic accreditation?

To obtain a professional engineering qualification you need an academically accredited degree. If you have one, then your work since graduation will be evaluated against the graduate level learning outcomes specified in the aforementioned accords.

Academic accreditation of an engineering degree programme means that the programme has met the high standards set by the engineering profession, and re-tested every 5 years. Standards for accreditation of engineering programmes in the UK are set by the Engineering Council, which is the regulatory body for the profession, in consultation with the discipline specific Professional Engineering Institutions (PEI).

Our degree programmes are unique for a named engineering degree since we have satisfied the requirements of four PEI’s, which underlines the depth and breadth of our programmes. Our degree programmes have the breadth of a general engineering degree, but through your pathway/stream selection your degree has the same depth as four sub-branches of engineering.

Your pathway/stream selection on your degree programme means that when you graduate you will have a strong alignment with one of the PEI's. You should then become a member of that PEI, who will then mentor you through the years from graduation through to professional registration.
What are the benefits of accreditation?

Accreditation means that you can be sure that your degree programme provides a solid underpinning in the subject and meets the current and future needs of employers. It will be current, relevant and well-regarded within the discipline. Graduating with an accredited degree provides you with a competitive advantage in the jobs market, and offers you international job mobility.

Professional accreditation of our programmes

An academically accredited degree can be achieved either with an undergraduate Integrated Masters degree (e.g. a MEng) or the combination of a three year undergraduate and a one year postgraduate degree programmes (e.g. BEng + MSc). If your registration is based on two degrees and one of your degrees has not been accredited, it means that you will need to offer extra years of graduate level work experience in lieu of the absence of an accredited degree.

The BEng and MSc Biomedical Engineering programmes are accredited by four PEI’s on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer (IEng) and partly meeting the academic requirement for registration as a Chartered Engineer (CEng).

The MEng Biomedical Engineering programme is accredited by four PEI’s on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer (CEng).

The table below shows the start and end dates for our academic accreditation. The accreditation is awarded for a maximum period of 5 years. Therefore, we apply for academic accreditation periodically, such that the end dates shown below will be extended, without any intermediate years without accreditation.

<table>
<thead>
<tr>
<th>MSc stream</th>
<th>IPEM 2012-18</th>
<th>IMechE 2013-19</th>
<th>IOM3 2013-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomaterials and Tissue Engineering</td>
<td>IPEM 2012-18</td>
<td>IMechE 2013-19</td>
<td>IOM3 2013-17</td>
</tr>
<tr>
<td>Biomechanics and Mechanobiology</td>
<td>IPEM 2012-18</td>
<td>IMechE 2013-19</td>
<td>IOM3 2013-17</td>
</tr>
<tr>
<td>Medical Physics and Imaging</td>
<td>IPEM 2012-18</td>
<td>IMechE 2013-19</td>
<td></td>
</tr>
<tr>
<td>Neurotechnology</td>
<td>IPEM 2012-18</td>
<td>IMechE 2013-19</td>
<td></td>
</tr>
</tbody>
</table>

You can find out more about the PEIs at:

IPEM:  [http://www.ipem.ac.uk/](http://www.ipem.ac.uk/)


You can find out more about the Engineering Council at:  [http://www.engc.org.uk/](http://www.engc.org.uk/)
5. Assessment

Assessment structure

To be awarded the MSc students must produce required coursework, take certain written examinations, carry out a project and submit a project dissertation. There are three elements to the MSc, the core subjects, the specialist (stream specific) subjects, and the project. Coursework and exams are allocated to one of the first two elements. Students must obtain an aggregate of 50% in all three elements to pass the course. The weighting of the elements is core subjects 30%; specialist subjects 30%; Project 40%. The breakdown of sub-weightings within each element is given in the tables below.

### Core Element

<table>
<thead>
<tr>
<th>Module</th>
<th>Sub-Weighting (of this element)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Imaging</td>
<td>20%</td>
</tr>
<tr>
<td>Journal Club</td>
<td>20%</td>
</tr>
<tr>
<td>Medical Device Certification</td>
<td>20%</td>
</tr>
<tr>
<td>Systems Physiology</td>
<td>20%</td>
</tr>
<tr>
<td>Statistics and Data Analysis</td>
<td>20%</td>
</tr>
</tbody>
</table>

### Specialist Element

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Module</th>
<th>Sub-Weighting (of this element)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomechanics Pathway</td>
<td>Biomechanics</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Physiological Fluid Mechanics</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Cellular Biomechanics</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Orthopaedic Biomechanics</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Elective module</td>
<td>20.0%</td>
</tr>
<tr>
<td>Biomaterials Pathway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Biomaterials</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>Advanced Biomaterials</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>Advanced Tissue Engineering</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>Tissue Engineering and Regenerative Medicine</td>
<td>20.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Physics Pathway</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective module</td>
<td>20.0%</td>
</tr>
<tr>
<td>Advanced Physiological Monitoring and Data Analysis</td>
<td>20.0%</td>
</tr>
<tr>
<td>Image Processing</td>
<td>20.0%</td>
</tr>
<tr>
<td>Advanced Medical Imaging</td>
<td>20.0%</td>
</tr>
<tr>
<td>Health Economics and Decision Making</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neurotechnology Pathway</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective module</td>
<td>20.0%</td>
</tr>
<tr>
<td>Introduction to Neuroscience</td>
<td>20.0%</td>
</tr>
<tr>
<td>Computational Neuroscience</td>
<td>20.0%</td>
</tr>
<tr>
<td>Brain Machine Interfaces</td>
<td>20.0%</td>
</tr>
<tr>
<td>Machine Learning and Neural Computation</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

| Elective module                             | 20.0%  |
### Project Element

<table>
<thead>
<tr>
<th>Module</th>
<th>Sub-Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Report</td>
<td>10%</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Dissertation</td>
<td>80%</td>
</tr>
</tbody>
</table>

### Rules of Progression and classification

#### Pass

A student must:
- Achieve an aggregate mark of at least 50% in each of the three programme elements.
- Achieve a mark of at least 50% in the individual project
- Achieve an aggregate mark of at least 50% for the programme as a whole
- A student may be condoned in modules up to the value of 15 ECTS with a qualifying mark of at least 40%.

#### Merit

A student must:
- Achieve an aggregate mark of at least 50% in each module.
- Achieve a mark of at least 60% in the individual project
- Achieve an aggregate mark of at least 60% for the programme as a whole
- A student may be condoned in modules up to the value of 15 ECTS with a qualifying mark of at least 40%.

#### Distinction

A student must:
- Achieve an aggregate mark of at least 50% in each module.
- Achieve a mark of at least 70% in the individual project
- Achieve an aggregate mark of at least 70% for the programme as a whole
- A student may be condoned in modules up to the value of 15 ECTS with a qualifying mark of at least 40%.

### Grade descriptions

In UK universities, exams and coursework are set to challenge all students even the best. Typically, modules have a mean mark in the range 60-70%. This is very different to for example Grade Point Average systems used in other countries, where the class mean is much higher. While exam marks are determined by the mark schemes, the following grade descriptors may be helpful in explaining what the examiners are looking for.
<table>
<thead>
<tr>
<th>Class: Mark</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st: 70%+</td>
<td>An excellent piece of work that is well set out, lucid, unambiguous and factually complete. Indicates that the student has a good grasp of the concepts and mechanisms involved. Includes a critical or creative contribution. Good diagrams where appropriate.</td>
</tr>
<tr>
<td>Upper 2nd: 0-69%</td>
<td>A clear exposition that contains the essential material, (including basic mechanisms, concepts) and sufficient additional material to show that the student has a good understanding of the subject. Good diagrams where appropriate. Normally free from errors in reasoning.</td>
</tr>
<tr>
<td>Lower 2nd: 50-59%</td>
<td>An adequate presentation, which includes most of the essential material logically presented with indications that it is understood rather than simply regurgitated.</td>
</tr>
<tr>
<td>3rd: 40-49%</td>
<td>Presentation of some of the basic facts/mechanisms but with little detail and some omissions and errors.</td>
</tr>
<tr>
<td>Fail 39-30%</td>
<td>Facts rather thin, with some material confused or presented in an ambiguous manner that suggests that the student does not fully understand the appropriate concepts.</td>
</tr>
<tr>
<td>Bad Fail 29% or less</td>
<td>Clearly lacking in content. Confused or erroneous reasoning. Major point(s) omitted and errors of fact.</td>
</tr>
</tbody>
</table>

**Examination timetables**

The Department's main exam periods are in December/January, and May/June. Exam timetables are typically released in November for the December/January exams, and in March for the May/June exams. Once the exam timetable is set and published it will not be changed. It is entirely possible that you may have an uneven distribution of exams and you should be prepared to have several exams in one week. We do our best to avoid any students having to sit two exams in one day, but it does occasionally happen and so you should be prepared for this. Do not leave all your revision to the last minute!

If, when you see the exam timetable, you think that you have a clash (e.g. two or more exams scheduled at the same time) then please come to the Student Office and we will be able to help.

**Accessing past examination papers**

You can access past examination papers via Blackboard to help you in your revision.

**Resit-re-entry rules**

Students failing their first attempt at the year may, at the discretion of the Examination Board, return the following year to re-sit those examinations which were failed for modules which were failed. Normally, during a re-sit year, the student does not attend College, but the Examiners may, at their discretion, invite or require the student to retake the year in attendance. Coursework marks for students who are re-sitting exams only will be carried over from the year in which they took the coursework. Where a student is judged by the Examiners not to be engaged with the course and/or not working hard enough, the Examiners have the option of requiring the student to withdraw from the programme. Students attempting the year for the second time will not normally be considered for condoning of failures. Students failing their second attempt will not be offered a further attempt.
**Missed Exams**
For non-final years, if a student misses any exams through illness or other reason with mitigating circumstances acceptable to the Board of Examiners, in the case that one or two exams are missed:

- If there was coursework for the course then the coursework mark to be considered in lieu of exam mark.
- If there is evidence of learning then the exam is set to ‘Pass’ and the course is removed from the year mark calculation.
- In exceptional circumstances, a special assessment may be set and sat at a later date.

Otherwise, if at least three exams are missed, the student is to be invited back to take exams the following summer, and the Board of Examiners should consider whether the student would benefit from attending the whole year again.

In the final year, the College rules are followed for the award of an Honours degree under classified aegrotat provision, or if there has been a significant but insufficient assessment in the final year the student is offered an aegrotat degree. See the College’s academic regulations for BEng/MEng degrees.

**Marking of examinations**
In the Department of Bioengineering we take great care to ensure the marking of examinations is accurate and fair.

You can read the College policy on exam marking at: [https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marking-and-moderation/Protocol-for-marking-and-moderation.pdf](https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marking-and-moderation/Protocol-for-marking-and-moderation.pdf)

The Department of Bioengineering uses ‘check marking’ so at least two people have read each script and agreed the mark. Examinations are initially marked by the module lecturer(s). The marked scripts are returned to the Student Office. The scripts are then checked, so a second marker reads each script and confirms the marks awarded are appropriate, and that marks have been correctly summed and logged for the paper. Administrative staff also audit examination mark sheets to ensure there are no errors in the arithmetic and no pages have been missed.

Sample exam scripts and coursework are audited by External Examiners.

**Moderation policy**
Occasionally it is necessary to moderate exam and/or module marks to account for a variety of situations (e.g. an exam that turned out to be too difficult, or failed to discriminate between students well near the pass mark). Moderation only takes place on anonymised module marks.

The process of moderation for modules run by the Department of Bioengineering is explained below.

Module examiners mark exams and coursework according to the marking scheme agreed with the External Examiners. If small modifications to the marking scheme are necessary, these can be implemented and are noted at the Examiners’ Progression and Awards Board.

Modules are then reviewed by a moderation panel consisting of at least three of the following: Academic Tutor, Courses, Senior Tutor, Examinations Officer, Director of Postgraduate Studies or their representatives or deputies.

The panel reviews the mean, standard deviation and also the distribution of the module marks. If the panel decides the distribution is unsatisfactory then moderation is considered and the Departmental moderation policy applied. The following moderations are usually considered:

a. If the mean is outside desired range, the minimal shift to bring it into this range is normally performed;
b. If there is a double peak or a long tail, a ‘tail uplift’ moderation is usually performed;
c. If there is a more complex problem (e.g. faulty question part), the panel may consider the effect of using more targeted, question based moderation.
Moderations are discussed with the External Examiners prior to the Examiners' Progression and Awards Board and again at the Examiners' Progression and Awards Board itself. This ensures all students are treated fairly and no one is disadvantaged by the process. Finally, at the Board module leaders are requested to provide an explanation to the Board as to what happened, and present a plan to avoid moderation next year.

**Mitigation policy**

During your degree there may be exceptional times when your attendance, performance, ability to complete and submit work, sit exams or tests or otherwise meet your responsibilities as a student are adversely affected by circumstances beyond your control. Examples of these circumstances are serious illness or death of a close relative.

When genuine mitigating circumstances occur, the Department will do its best to help you deal with the situation, and ensure that you are not penalised for something that is not your fault.

The Department must also be careful to ensure that the circumstances are genuine and sufficiently serious enough to be classified as mitigating circumstances. Any fraudulent claims will be dealt with by the College’s disciplinary procedures.

The College therefore has a form for students to request that mitigating circumstances are taken into account, which is available from the College website (https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/).

In most cases students will also be required to submit documentary evidence, such as an official doctor's note.

If you think you have mitigating circumstances affecting any of the following:

- Attendance at Exams
- Submission of coursework
- Attendance at progress tests, oral tests or any other kind of test whether assessed or non-assessed.
- Any other responsibility as a student that is assessed, affects the assessment of others or may have any impact on marks or qualification.

Inform the Student Office as soon as possible in person or by telephone on +44 (0)20 7594 9296 or +44 (0)20 7594 5122 followed by a confirmation email to m.obrien@imperial.ac.uk or r.pointer@imperial.ac.uk. If possible this should be before the deadline or affected exam.

If you cannot contact the Department, because for example it is the weekend, email m.obrien@imperial.ac.uk and r.pointer@imperial.ac.uk as soon as possible. Please use your Imperial College email address if possible to ensure your email does not get spam filtered.

Then the following procedure must be followed:

1. Fill in the College form requesting consideration of mitigating circumstances and submit it,
2. The form should be submitted to the Student Office except in the case where confidentiality is essential, in which case it should be submitted to the Senior Tutor or Deputy Senior Tutor, and the Student Office should be notified that it has been submitted.
3. Obtain the necessary documentary proof – e.g. if you are ill, a doctor’s note from a professionally recognised doctor. The College Health Centre is the best place for this as they understand that we require their opinion on the likely effects of your illness on your performance.

The complete form together with the documentary proof should be submitted as soon as possible, and within 5 working days of the start of the circumstances.

All cases will be considered by a Departmental Mitigating Circumstances Panel, consisting of the Senior Tutor, Deputy Senior Tutor, and Academic Tutor, who meet throughout the term to make a provisional ruling. This is subject to approval by the Examinations Board, which meets at the end of the academic year.
If the circumstances described in the request form are not considered serious enough to be genuine mitigating circumstances) or the evidence is not sufficient, then the request will be rejected, and the situation will be treated as it would have been had the request not been made.

For example if an exam was missed for a reason that was not considered a genuine mitigating circumstance, (e.g. student had the wrong day) then the exam would be counted as a fail.

If the request for mitigating circumstances is accepted, the Departmental Mitigation policy is followed:

**In the case that one or two exams are significantly affected, the following potential outcomes apply:**

1. If there is an opportunity to resit the exam without disadvantaging the student, by for example taking a second mastery test as if it were the first attempt, then this the favoured option.
2. If the exam was taken and there is some evidence of learning (from for example coursework) then the mark is set to ‘MP”, Mitigated Pass, which removes the mark from the degree calculations while allowing progression to the next year.

If a student has mitigating circumstances affecting all exams rather than one or two exams specifically identified as being affected, one or two exams may be set to ‘MP’, to take into consideration their overall performance.

Otherwise, if more than two exams are significantly affected or, if overall performance is catastrophic, the student will be invited back to take exams, and the Board of Examiners should consider whether the student would benefit from attending the whole year again.

**In the case that coursework has been missed, the following potential outcomes apply:**

1. The coursework be accepted for full credit or;
2. That a new piece of coursework be submitted with a new deadline for full credit or;
3. The Committee will suggest an appropriate alternative assessment.

Please note that the Board of Examiners will look at patterns of lateness of coursework submission and lecture, tutorial and lab attendance over all terms when deciding which of the above outcomes is applicable.

**Aegrotat provision**

See the College’s academic regulations for MSc degrees.

(https://www.imperial.ac.uk/about/governance/academic-governance/regulations/)

**Assessment of project work**

Please see the Project Handbook for details on how the projects are assessed.

**Coursework deadlines and academic feedback policy**

**Types of coursework**

During your degree, you will work on various sorts of exercises to be carried out outside the classroom. These will include problem sheets, projects, practical reports and essays. Many modules include some assessed coursework (summative assessment). You may also have coursework to complete which doesn’t contribute to your final mark but is for your learning (formative assessments).

It is extremely important that you complete all your coursework, whether formative or summative, as it is set for your learning.

**Deadlines for coursework**

There are very strict deadlines for the submission of assessed coursework. You should plan your work so that you can complete these assignments in the appropriate time. To help you plan and manage your time, the Department publishes the coursework deadlines for the forthcoming term, and publishes the date by which you can expect to receive feedback. This information is provided at the start of term.
The date and time for coursework submission will be published and it is essential that you submit your coursework by this time. Please be aware that all dates and times are in UK local time and it is your responsibility to ensure these are met. The method by which you submit your coursework will be explained by the relevant module leader.

**Definition of late submission**
Late submission is defined by the College as: “any piece of assessed work which is submitted beyond the published deadline (date and time).”

**Penalties for late submission**
Work submitted up to 24 hours after the assessment deadline will be marked but the mark will be capped at the passmark (typically 40% for undergraduate students and 50% for postgraduate students).

Work submitted more than 24 hours after the deadline will not be accepted as a valid attempt and a mark of zero will be recorded. The Department is not obliged to mark (or provide feedback on) work submitted more than 24 hours after the deadline but may do so if it judges the submission to be in a reasonable time and that there are educational benefits. If late work is marked, feedback and marks may be provided outside of the published schedule.

This policy relates to calendar days and so both weekends, weekdays and public holidays are included.

**Plagiarism**
Coursework must be your own work and not copied, or plagiarised, from others. Most coursework will be submitted electronically via Blackboard, which has a plagiarism detector called TurnItIn. For more information on plagiarism, please see information in your handbook or on the College website at: https://www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/.

**Mitigating Circumstances**
This policy on late submission does not apply where a student has been granted an extension as a result of successfully making a claim for mitigated circumstances, but it would apply if a student missed the extended deadline without any subsequent approved further extension.

The full College Policy on Late submission of Assessment can be found online at: https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marketing-and-moderation/Late-submission-Policy.pdf

**Academic Feedback on Assessment**

**Marks**
Coursework marks will either be returned to you by the responsible lecturer, will be available from the Student Office, or will be available on the College's Virtual Learning Environment (VLE), Blackboard.

**Issuing of provisional marks**
The Department may release provisional marks for some assessed work prior to ratification by the Board of Examiners. It will be made clear to students in the coursework calendar if provisional marks will be released or not. Where such marks are released, they are provisional and are subject to change by the Board of Examiners.

Provisional marks will not be released for major pieces of work (e.g. dissertations) prior to the meeting of the Board of Examiners.

The College’s full policy on the Issuing of Provisional Marks to Students is available online at: https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marketing-and-moderation/Guidelines-for-issuing-provisional-marks-to-students-on-taught-programmes.pdf.
**Feedback formats**

Feedback may be provided in one of a number of formats, including (but not limited to):

- Oral (during or after lectures, personally or as a group feedback session)
- Personal (discussion with academics during office hours, meetings with Personal Tutors)
- Interactive (problem solving tutorials with GTAs & study groups, peer feedback)
- Written (solutions/model answers to coursework, electronic feedback on online quizzes)

**Timing of feedback**

The dates for students to receive feedback on their assessments are indicated in the coursework calendars provided before the start of teaching.

Typically, these deadlines are set for 10 working days (not including weekends, public holidays or College Closure days) after the submission deadline. However, in some circumstances, such as when an assessment is particularly significant and will therefore take a long time to mark, a longer timeframe for feedback may be set. A longer timeframe will also be set for feedback on examinations.

Please refer to the coursework calendar for information on when coursework is due for submission and when you can expect to receive feedback on your work.

**Feedback on exams**

Preliminary exam results will be provided to students as provisional marks. These results are provisional and are subject to change by the Board of Examiners, for example by moderation. Module leaders will produce a short summary of cohort performance in examinations which will be provided to students after the Board of Examinations.

**College policy on exams and religious obligations**

The major examination periods are timed to accommodate the requirements of each individual degree programme and you may therefore find that you have an exam scheduled during a particular religious festival or period of religious observance.

If this is the case you should speak to someone in the Department as soon as possible – usually this would be the Postgraduate Tutor. Your Tutor should listen to your situation and discuss potential solutions with you, although it will not always be possible to find a solution.


**Instruction to Candidates for Examinations**

Students who are candidates for examinations are asked to note that all examinations are conducted in accordance with the College’s Academic Regulations, the Regulations for Programmes of Study and the Examination Regulations.

Instructions for exam candidates can be found here:

Plagiarism

Plagiarism is the presentation of another person’s thoughts, words, images or diagrams as though they were your own. Another form of plagiarism is self-plagiarism, which involves using your own prior work without acknowledging its reuse.

Plagiarism is considered a cheating offence and must be avoided, with particular care on coursework, essays, reports and projects written in your own time and also in open and closed book written examinations.

Where plagiarism is detected in group work, members of that group may be deemed to have collective responsibility for the integrity of work submitted by that group and may be liable for any penalty imposed, proportionate to their contribution.

For further information, please refer to the Academic Misconduct Policy and Procedures section in this handbook.

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Where plagiarism is detected in group work, members of that group may be deemed to have collective responsibility for the integrity of work submitted by that group and may be liable for any penalty imposed, proportionate to their contribution.

For further information, please refer to the Academic Misconduct Policy and Procedures section in this handbook or the Colleges Plagiarism, Academic Integrity & Exam Offences site:


This information provides you with an overview of plagiarism. Plagiarism is a very serious offence and you need to know what it is, how to avoid it, and what the consequences are. You are strongly advised to read the following information sources to ensure you fully understand the issues:

https://www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/masters-students/

What is plagiarism?

Plagiarism is when you use someone else’s work, words or ideas and use these in your own work (e.g. coursework, thesis, examination, etc.), and do not acknowledge that you have done this.

Plagiarism is defined by the College as:

"Plagiarism, which is the presentation of another person's thoughts, words or images and diagrams as though they were your own and which is a form of cheating, must be avoided, with particular care in coursework, essays, reports and projects written in your own time and also in open and closed book written examinations."

Plagiarism can occur in a number of ways. The six main types of plagiarism include:

- Collusion
- Cut/copy and paste
- Word switch
- Concealing sources
- Misinterpreting common knowledge
- Self-plagiarism
It is extremely important you have an awareness of what plagiarism is and how to avoid it.

You should be aware that there are different styles of referencing. If you are not sure which to use speak to your Module Leader for advice. If you are at all unsure about how to reference or cite your sources there is very useful guidance here:


Or, you can seek help from your tutor or Liaison Librarian:

http://www.imperial.ac.uk/admin-services/library/subject-support/bioengineering/.

Why is it a problem?

At Imperial, as in other universities, plagiarism is considered an examination offence, and is often described as cheating. Your lecturers will use a number of methods to detect plagiarism, which may include an electronic detection tool. Some students commit plagiarism when preparing written pieces of work without being aware of it.

It is important that you:

- Know what plagiarism is, and why it is an academic offence
- Are aware that all material you use from online and print sources should be acknowledged properly
- Understand whether assigned group work is to be submitted with individual contributions or as a joint piece of work
- Know that if you re-use parts of your own work, you must acknowledge this (to not do so is self-plagiarism).
- Speak to your lecturers or tutors if you are not sure about the appropriate use and correct acknowledgement of other sources in your own work.

What happens if I commit plagiarism?

- The College will investigate all instances where an examination or assessment offence is reported and apply appropriate penalties to students who are found guilty.
  - These penalties could include:
    - A mark of zero for the assessment in which the examination offence occurred
    - A mark of zero for all the assessments in that year
    - Exclusion from all future examinations of the University (i.e. expulsion from the university)
- Where plagiarism is detected in group work, members of that group may be deemed to have collective responsibility for the integrity for work submitted by that group and may be liable for any penalty imposed.
- More information about the consequences of plagiarism is available in the College’s ‘Cheating Offences Policy and Procedures’.

Key points to remember:

- All work that you submit must be expressed in your own words and incorporate your own ideas and judgements, and where you have used other peoples’ work you must clearly acknowledge and identify your sources.
- You must not present another person's work, thoughts, words or images and diagrams as though they were your own, under any circumstances.
- Direct quotations from the published or unpublished work of others, must always be clearly identified as such by the use of quotation marks. A full reference to their source must be provided in the proper form. This applies to a series of short quotations from several different sources just as much as a single unacknowledged long quotation from a single source.
- There is guidance available on quoting in different referencing styles available:

- If you summarise or paraphrase another person's ideas or judgements, figures, diagrams or software, you must refer to that person in your text, and include the work referred to in your bibliography.
- Plagiarism can occur in closed book written examinations. For example, if you have learnt text by heart and simply reproduce this information without attribution. The examiners may regard text reproduced without reference or critical analysis as plagiarism.
- The direct and unacknowledged repetition of your own work which has already been submitted for assessment can constitute self-plagiarism.
- Where group work is submitted, this should be presented and referenced, with individual contributions recorded, in the convention appropriate to your discipline.
- If you become aware that a member or members of the group may have plagiarised part of the group’s submission you have an obligation to report your suspicions to your Personal or Senior Tutor.
- The use of the work of another student, past or present, also constitutes plagiarism. Giving your work to another student to use may also constitute an offence.
- The College may submit your work to an external plagiarism detection service, and by registering with the College you are automatically giving your consent for any of your work to be submitted to such a service. If you have been thorough with your referencing and citations there is absolutely nothing to worry about with regards to this.

Submission for most coursework is through the Turnitin submission system in Blackboard (http://learn.imperial.ac.uk). This is a system that reads the submission and compares it with a very large library of existing material, and also with other submissions of the same piece of coursework. Turnitin is a highly effective tool in identifying attempts at plagiarism.

6. Board of Examiners

**External Examiners (MSc Biomedical Engineering)**

- Professor John Lowry: National University of Ireland Maynooth
- Professor Patricia Lawford: University of Sheffield
- Professor Barbara Webb: University of Edinburgh

**External Examiners (all programmes in the Department of Bioengineering)**

- Professor Anna Barney: University of Southampton
- Dr Amy Zavatsky: University of Oxford
- Professor Patricia Lawford: University of Sheffield
- Professor John Lowry: National University of Ireland Maynooth
- Professor Barbara Webb: University of Edinburgh
- Professor Alberto Saiani: University of Manchester
- Mark Van Rossum: University of Nottingham
- TBC
External examining acts as an essential part of the College’s quality assurance and enhancement process, serving to ensure that academic standards are maintained. The knowledgeable and independent views of external examiners are invaluable in certifying that the College’s awards are appropriate and comparable as well as highlighting good practice and potential areas of enhancement.

It is inappropriate for you to submit complaints or representations direct to external examiners or to seek to influence your external examiners. Inappropriate communication towards an examiner would make you liable for disciplinary action.

A summary of External examiners reports from the previous academic year can be found here:

www.imperial.ac.uk/staff/tools-and-reference/quality-assurance-enhancement/external-examining/information-for-staff
7. Location and facilities

Imperial has a number of campuses in London and the South East. All have excellent travel links and are easily accessible via public transport.

Location
Your main location of study will be:

📍 South Kensington
   Exhibition Road, SW7 2AZ

Shuttle bus
A free shuttle bus runs between our South Kensington, White City and Hammersmith Campuses on weekdays. Seats are available on a first-come, first-served basis. You need to show your College ID card to board. Download the timetable at:

💻 [www.imperial.ac.uk/estates-facilities/travel/shuttle-bus](http://www.imperial.ac.uk/estates-facilities/travel/shuttle-bus)

Maps
Campus maps and travel directions are available at:

💻 [www.imperial.ac.uk/visit/campuses](http://www.imperial.ac.uk/visit/campuses)

Accessibility
Information about the accessibility of our South Kensington Campus is available online through the DisabledGo access guides:

💻 [www.disabledgo.com/organisations/imperial-college-london-2](http://www.disabledgo.com/organisations/imperial-college-london-2)

Smoke-Free Policy
All Imperial campuses and properties are smoke-free. This means that smoking by staff and students is not permitted on or within 20 metres of College land. The policy covers all College properties, including student accommodation and sports grounds.

💻 [www.imperial.ac.uk/smoke-free](http://www.imperial.ac.uk/smoke-free)

Café and refreshments
The nearest café to the Department is located on Level 3 of the Royal School of Mines. The College Café, located off Dalby Court, is also nearby.

Accessing the Department
Your ID card will give you access to the Department and laboratories (where appropriate/requested).

In the interests of safety and security, please:

- Do not prop doors open
- Be aware of tailgating (someone following you through an access-restricted area)
You may work in the Department only between specified times, as detailed below. If you need to arrange other access please speak to your supervisor, tutor or the Student Office. College Security is very strict about this and comes down heavily on students and staff who do not comply. If you have any problems with your ID card, please contact staff at the Student Office (RSM 3.21c).

Access times for different users in the Department of Bioengineering:

<table>
<thead>
<tr>
<th>ID card group</th>
<th>Times</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>07:00-23:59</td>
<td>7 days a week</td>
</tr>
<tr>
<td>PhD</td>
<td>07:00-23:59</td>
<td>7 days a week</td>
</tr>
<tr>
<td>MSc, MRes</td>
<td>08:00-18:30</td>
<td>5 days a week</td>
</tr>
<tr>
<td>UG</td>
<td>08:00-18:30</td>
<td>5 days a week</td>
</tr>
</tbody>
</table>

At some stage during your time in the Department, it may be necessary for you to gain access to some restricted areas, e.g. certain laboratories. If this is the case, you will need to follow these steps: Get permission from your supervisor and the lab lead PI.

1. Ensure the relevant safety assessments are completed, including a risk assessment of work to be carried out.
2. Ensure the induction is carried out and the form completed (see Link to Swipe access information: http://www.imperial.ac.uk/bioengineering/admin/info/swipe/ for more information)
3. Complete the online access request (including the uploading of the completed induction form).

**Computer access**

Computer access and printing is available in the Student Common Room (3.06 RSM). Students can also use G.08 on the ground floor of RSM.

**Printing**

The Department has black/ white and colour photocopiers in the utility areas on Levels 3 and 4 and in RSM 3.06 which are accessed using your ID card. These can also be used as printers and scanners via the ICT print service – check http://www.imperial.ac.uk/ict/printservice for information on using this service. An additional colour (ICT) copier/printer is available in RSM 3.38.

If you have problems with these machines or your swipe card, please contact ICT - do not try to correct problems yourself. All student groups/years will receive an initial print credit on their account. Please try to use Departmental printers for your printing where possible, as opposed to those in other areas of the College.

**Virtual Learning Environment (VLE): Blackboard**

The Department makes use of the ‘Blackboard’ virtual learning environment - a web-based system hosted by ICT. You can login to Blackboard from the following link: https://bb.imperial.ac.uk/

Lecture notes and problem sheets can be found on Blackboard by navigating to the appropriate module using the links provided, and some modules will use it for more advanced purposes, such as self-tests and assessed coursework tests.

If you have any problems accessing Blackboard, try trouble shooting this first:

- Check if your computer allows Java pop ups.
- Try using Firefox browser if you used IE before.

We strongly advise students to report any technical problems to ICT when submitting assignments so that they can keep a record and help you swiftly. You can contact ICT from an internal phone on
extension number 49000, or from any other phone on 0207 59 49000. Alternatively you can raise an issue via the ASK ICT service (https://imperial.service-now.com/ict/).

**Panopto**

Panopto is a College ICT service that allows the recording of a computer screen, in addition to audio and visual content. The Department aims to record as many lectures as possible. Most of the lectures that take place in the lecture theatres RSM 147 and RSM 228 are recorded and linked to the appropriate module page on Blackboard. Lectures outside of these rooms may not be recorded due to unavailability of equipment. If you cannot access a recording, please speak to the Student Office.

To watch lecture recordings, go to the respective module page on Blackboard (https://bb.imperial.ac.uk) and find the link called ‘Lecture Recordings’ in the left-hand menu. You will be prompted to log in once you click on the link.

You can find out more about Panopto and lecture recordings at: http://www.imperial.ac.uk/admin-services/ict/self-service/teaching-learning/elearning-services/panopto/students-use/.

Before using Panopto, please ensure you have read the College’s guidelines on audio and video lecture recording: https://www.imperial.ac.uk/media/imperial-college/whats-on/public/Audioandvideolecturerecordingguidelines.pdf.
8. Life in the Department

We believe that the Department of Bioengineering is a welcoming and lively place to be. There are lots of events happening throughout the year and we really encourage you to get involved with Departmental life and make the most of the opportunities available to you, whether you are a first year, a final year, or a postgraduate student.

There are also many opportunities available to you as a student of Imperial College London. There are numerous talks, seminar series, student clubs, summer school and volunteering opportunities for you to participate in and enjoy. Find out more on the website at: https://www.imperial.ac.uk/students/.

Seminar programme
The Department of Bioengineering hosts a seminar programme on Wednesdays at 4pm, with guest speakers from other institutions talking about a range of academic topics relevant to Bioengineering. Find out more, including upcoming dates, on the Events page of the website: http://www.imperial.ac.uk/bioengineering/whats-on/events/.

Outreach
The Department of Bioengineering hosts and participates in many outreach events. For more information, or to find out about getting involved, you can:

- Contact the Admissions and Outreach Manager Lorna Stevenson (lorna.stevenson@imperial.ac.uk)

Prizes and awards in the Department
There are many prizes and awards received each year by students in the Department of Bioengineering. These can be specifically for undergraduates, postgraduates, or for any students in the Department. Some are run by the Department and others are College-level awards. You can find out more about these awards and prizes, including background information and eligibility, on the website at: http://www.imperial.ac.uk/bioengineering/admin/current-pgt/prizes/.

Imperial College Union Bioengineering Society
The Imperial College Union Bioengineering Society is a constituent society of the Imperial College Union, under the wing of the City and Guilds College Union (CGCU). Started 13 years ago by a group of enthusiastic MSc students, the ICU Bioengineering Society has been run, since its inception, with the aim of broadening the experiences of Bioengineering students beyond that of the curriculum. All undergraduate and postgraduate students enrolled in the Department of Bioengineering are automatically a part of the Bioengineering Society.

Find out more by looking at the Society's website: https://www.union.ic.ac.uk/guilds/bioeng/.

Imperial College Union-Engineering Students’ Association
The IC Engineering Students’ Association has the following objectives:

- To aid the academic, welfare, sporting and social interests of members of the faculty
- To encourage, promote and support clubs and societies
- To represent the needs and interests of members to the College, ICU and external bodies.

Find out more by looking at the Association’s website: https://cgcu.net/

Engineers Without Borders Society (EWB-UK)
Engineers Without Borders Society (EWB-UK) is a student-led charity aiming to facilitate human development through engineering. If you wish to find out more please visit the website at: http://www.ewb-uk.org/
Other activities
There is a very wide range of non-academic activities available and we recommend that you participate in these activities to gain a wider experience of the life here at Imperial and in London, and in many cases you can pick up skills that employers value.

Fresher’s Fair in Week 1 gives you the opportunity to see what is available and introduce yourself to the organizers of those activities. Find out more on the website at: http://www.imperial.ac.uk/students/new-students/welcome-week/.
9. Placements

The College defines a placement as:

"work experience, assessed project work, a period of course-based study or a period of research (for which academic credit is awarded and/or where the student remains subject to College student regulations during the relevant period) and where there is a transfer of direct supervision of the student to a third party (i.e. where a member of staff at the third party acts as the day-to-day supervisor/manager) for a period of two weeks or more."

Academic departments are responsible for managing any study or work placement which forms part of your degree programme. It is expected that you will contribute to the process of planning your placement.

For guidance on this, see the College’s Placement and Learning Policy and associated good practice:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/placement-learning

Your Departmental Placement Manager:

Mr Robert Ferguson

Telephone: 020 7594 6371

Email: robert.ferguson@imperial.ac.uk

For more information on placements visit the Placements website:

www.imperial.ac.uk/placements

If you are considering/planning a placement outside the UK you should also refer to the Placement Abroad Handbook:

www.imperial.ac.uk/placements/information-for-imperial-college-students
10. Working while studying
If you are studying full time, the College recommends that you do not work part-time 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 and not within normal College working hours.

Working in excess of these hours could impact adversely on your studies or health.

If you are here on a Tier 4 visa you can work no more than 20 hours a week during term time. Some sponsors may not permit you to take up work outside your studies and others may specify a limit.

If you are considering part-time work during term time you are strongly advised to discuss this issue with your supervisor or Personal/Senior Personal Postgraduate Tutor. If you are on a Tier 4 visa you should also seek advice from the International Student Support team regarding visa limitations on employment.

11. Bursaries and Scholarships
The College has a lot of resources available to help you find bursaries and scholarships to support your studies here.

A search tool is also provided to enable you to find out more about other available scholarships. You can find out more about these schemes and tools on the website at: https://www.imperial.ac.uk/study/pg/fees-and-funding/scholarships/.

The College also provides a list of funding opportunities from external organisations, for information. This list can be accessed online at: https://www.imperial.ac.uk/study/pg/fees-and-funding/scholarships/further-funding-opportunities/external/.

12. Health and safety
The College Safety Department
The Safety Department offers a range of specialist advice on all aspects of safety. This includes anything which you feel might affect you directly, or which may be associated with teaching, research or support service activities.

The College’s activities range from the use of hazardous materials (biological, chemical and radiological substances) to field work, heavy or awkward lifting, driving, and working alone or late.

All College activities are covered by general health and safety regulations, but higher risk activities will have additional requirements.

The Safety Department helps departments and individuals ensure effective safety management systems are in place throughout the College to comply with specific legal requirements.

Sometimes the management systems fail, and an accident or a near-miss incident arises; it is important that we learn lessons from such situations to prevent recurrence and the Safety Department can support such investigations. All accidents and incidents should be reported online at:

www.imperial.ac.uk/safety

To report concerns or to ask for advice you should contact your programme director, academic supervisor or departmental safety officer in the first instance. You may also contact the Safety Department directly.
Occupational Health requirements

The College Occupational Health Service provides services to:

- protect health at work
- assess and advise on fitness for work
- ensure that health issues are effectively managed

The Service promotes and supports a culture where the physical and psychological health of staff, students and others involved in the College is respected, protected and improved whilst at work.

[www.imperial.ac.uk/occupational-health](http://www.imperial.ac.uk/occupational-health)

The College’s Health and Safety Statement can be found at:

The Department of Bioengineering considers the health and safety of staff, students, contractors and visitors to be of paramount importance.

We expect staff, students, contractors and visitors to share our commitment to safety by complying with our policies and procedures and to understand that they too have legal and moral obligations to themselves and to one another.

You are responsible for looking after your own health and safety and that of others affected by your College-related work and leisure activities. You must:

- Comply with all local and College policies, procedures and codes of practice and with the arrangements which the College has in place to control health and safety risks.
- Ensure that your activities do not present unnecessary or uncontrolled risks to yourself or to others.
- Attend appropriate induction and training.
- Report any accidents, unsafe circumstances or work-related ill health of which you become aware to the appropriate person.
- Not interfere with any equipment provided for Health and Safety.
- Inform your supervisor or the person in charge of the activity in cases where you are not confident that you are competent to carry out a work or leisure activity safely, rather than compromise your own safety or the safety of others.

The College’s Health and Safety Policy can be found at:

The Department will provide, manage and maintain a work environment which is, so far as is reasonably practicable, safe and where risks to health are controlled.

The Department and College will offer training to all staff and students in safe methods of working and will foster responsible attitudes to health and safety. Specific methods of research and the safety of this is the responsibility of the Principle investigator.

As a student, you must not work alone and unsupervised, nor out of hours.
Your Departmental Safety Manager is:

Ken Keating (k.keating@imperial.ac.uk)
Room C01 – Bessemer building level 2
Telephone +44 (0) 20 7594 5170, 07590250478

All major health and safety decisions are made by the Departmental Safety Committee, which meets termly. Information about health and safety can be found on the College website at http://www3.imperial.ac.uk/safety

Further safety specific information regarding the departmental processes and procedures can be found at the departmental website: https://www.imperial.ac.uk/bioengineering/. (Internal > health and safety) It is essential that you ensure to familiarise yourself with these sites.

Emergency procedures
In an emergency, dial extension 4444 from any internal phone or 020 7589 1000. This line is supported 24 hours a day. State your exact location, your name and extension number. Security Control will immediately mobilise the required emergency services. Do not ring 999 – Security will coordinate this to ensure that the emergency services gain site access.

If you discover a fire, immediately press the nearest red alarm call point. Warn people in the vicinity. Evacuate the building and be ready to tell Security and Fire Officers where the fire is. Do not attempt to tackle fires, chemical spillages or intruders yourself. More information about fire safety is available on the Fire Safety website: http://www.imperial.ac.uk/estates-facilities/health-and-safety/fire-safety/.

Fire alarms
The emergency evacuation alarm is a continuous siren in the building. Leave the building immediately by means of the stairways – do not use lifts. Do not attempt to tackle fires, chemical spillages or intruders yourself.

Building evacuation
Familiarise yourself with the various evacuation routes and use the nearest staircase - see the maps at the end of the safety section in this handbook. Do not always head for the main staircase in the RSM regardless of where you are as this gets very congested. There is fire evacuation signage throughout the building identified by a white arrow on a green background and sometimes a “running man”.

From the main RSM staircase the fire exit is onto Prince Consort Road. The assembly point is towards the junction of Prince Consort Road and Exhibition Road. For the other evacuation routes

Security and safety are closely linked. Please help us keep the building secure and safe by following the following simple rules:

- Always wear your College Security/ID card whilst at College. Neck lanyards (red for students, blue for staff) are available from Security or the Student Office.
- Do not allow strangers in the building, particularly out of hours.
- Never lend your ID card to anybody; if they cause damage or present a risk to security or safety, you will be liable.
you should follow the signs down to the lower ground floor and then out onto the RSM courtyard at the rear of the building. The assembly point for these exits is by the Queens Tower.

In the event of a fire alarm all doors are automatically released from swipe card control and you will be able to access the corridors to the other stairwells. If the doors are not released automatically, press the green emergency exit button.

Leave the building quickly. Never use the lifts. Do not return to collect personal belongings.

PEEPS: to arrange a Personal Emergency Egress Plan please see the college guidance and contact the Departmental Safety manager.

First aid
Local emergency help is provided by qualified first-aiders – see the departmental website for a list of who these people are in the Department. If no local help is available, ring Security on extension 4444 from an internal phone or +44 (0)20 7589 1000.

Evacuation routes
Safety Induction

There will be a safety induction lecture during the first week of term - you are required to attend and a register will be taken.

Laboratories and Workshops

Undergraduates and MSc students may not use laboratory or workshop equipment without permission and until training has been given. All local rules must be adhered to at all times.

Please note:

- That you will not be given access to the labs until you have completed the necessary safety procedures, training and inductions - therefore do this promptly when you are asked.
- Departmental technical staff are here to assist you in your project, however please be aware that these are busy roles with many people to help so please plan in advance and make arrangements in plenty of time to avoid disappointment.

Practical Classes

For each practical class, an agreed risk assessment has been completed before commencement of each class. The objective is to ensure that all such classes are conducted in a safe manner, where exposure to any hazard is eliminated or minimised as far as is practicable. All relevant safety information will be provided in the instructions and protocols issued for each class.

Accidents and Near Misses

All accidents, dangerous occurrences or near misses must be reported to the academic member of staff giving the lecture/tutorial or supervising the practical class. It is then essential that a SALUS report is filed to allow this to be logged and any potential lessons to be learned, or improvement/fixes to be made to help prevent future occurrences.

It is appreciated that mistakes happen and that we can all make them from time to time. The department fosters a strict no blame culture and would like all occurrences to be reported on SALUS in order for us to ensure the safety of each researcher, staff member and student within it. We are all responsible for safety.
# FIRST AIDERS
Department of Bioengineering

FOR EMERGENCY MEDICAL ASSISTANCE

9AM to 5PM MONDAY TO FRIDAY

PLEASE CONTACT ONE OF THE FIRST AIDERS LISTED BELOW

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Phone</th>
<th>Lab</th>
<th>Lab Phone</th>
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<tbody>
<tr>
<td>Sabrina Skeete</td>
<td>RSM G.04</td>
<td>020 759 46764</td>
<td>B615</td>
<td>-</td>
</tr>
<tr>
<td>Martin Holloway</td>
<td>RSM 3.07</td>
<td>020 759 45176</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paschal Egan*</td>
<td>RSM 4.24</td>
<td>020 759 46497</td>
<td>-</td>
<td>020 759 46347</td>
</tr>
<tr>
<td>Nick Linton**</td>
<td>RSM 4.38</td>
<td>079 894 36479</td>
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<tr>
<td>Edit Toth</td>
<td>B215</td>
<td>020 759 45191</td>
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<tr>
<td>Jo Adam</td>
<td>B215</td>
<td>020759 46353</td>
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<tr>
<td>Kemi Aofolaju</td>
<td>B216</td>
<td>020 759 45179</td>
<td>-</td>
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</tr>
<tr>
<td>Joel Eustaquio</td>
<td>C01 Bessemer 2nd floor</td>
<td>078 728 50260</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marta Garcia Bellmunt</td>
<td>C01 Bessemer 2nd floor</td>
<td>07872 850 260</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Phill Pearce**</td>
<td>B304A</td>
<td>078 108 48848</td>
<td>-</td>
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<tr>
<td>Daniel Stinner**</td>
<td>B304A</td>
<td>077 242 75227</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Lance Rane**</td>
<td>B322</td>
<td>078 904 13322</td>
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<td>-</td>
</tr>
<tr>
<td>Jacques Bertrand</td>
<td>B313</td>
<td>020 759 41850</td>
<td>B314</td>
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</tbody>
</table>

*All have the Emergency First Aid at Work qualification except for Paschal Egan who has the full First Aid at Work qualification.
**Medically qualified.
If you cannot get hold of a local first aider, contact Security: 4444
Out of normal working hours contact Security: 4444
From a mobile ring: 020 7589 1000

Nearest First Aid Box and plasters: A first aid box is available in 3.05A.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Internal Phone</th>
<th>Room</th>
<th>Extention</th>
<th>Phone Number</th>
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</thead>
<tbody>
<tr>
<td>Niall Logan</td>
<td>RSM 3.18</td>
<td>-</td>
<td>B627</td>
<td>-</td>
<td>020 759 46348</td>
</tr>
<tr>
<td>Britta Ross</td>
<td>B215</td>
<td>020 759 41500</td>
<td>-</td>
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</tr>
<tr>
<td>Samantha Kemp</td>
<td>RSM 3.21c</td>
<td>020 759 49115</td>
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</tr>
<tr>
<td>Niraj Kanabar</td>
<td>RSM 4.24</td>
<td>020 759 45188</td>
<td>-</td>
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</tr>
<tr>
<td>Peter Hellyer</td>
<td>RSM 4.35</td>
<td>020 759 49568</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kemi Aofolaju</td>
<td>B216</td>
<td>020 759 45179</td>
<td>-</td>
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</tbody>
</table>
13. Regulations for Students
All registered students of the College are subject to the Regulations for Students, the College Academic and Examination Regulations and such other regulations that the College may approve from time to time.

www.imperial.ac.uk/about/governance/academic-governance/regulations
www.imperial.ac.uk/students/terms-and-conditions

14. Academic Feedback Policy
We are committed in providing you with timely and appropriate feedback on your academic progress and achievement, enabling you to reflect on your academic progress. During your study you will receive different methods of feedback according to assessment type, discipline, level of study and your individual need. Further guidance on the Policy of Academic Feedback can be found on the Academic Governance website:

http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-feedback/Academic-feedback-policy-for-taught-programmes.pdf

Please consult the Department’s coursework calendar for details on when you should submit your work and when you can expect feedback.

15. Provisional Marks Guidance
Provisional marks are agreed marks that have yet to be ratified by the Board of Examiners. These results are provisional and are subject to change by the Board of Examiners. The release of provisional marks is permitted except in certain circumstances. Further information can be found in the Guidelines for Issuing Provisional Marks to Students on Taught Programmes:


16. Late Submission Policy
You are responsible for ensuring that you submit your coursework assessments on time and by the published deadline. Any piece of assessed work which is submitted beyond the published deadline (date and time) would be classed as a late submission. Further guidance on Late Submission of Assessments can be found on the Academic Governance website:

Academic Integrity You are expected to conduct all aspects of your academic life in a professional manner. A full explanation of academic integrity, including information on the College’s approach to plagiarism is available on the College website:


17. Academic Misconduct Policy and Procedures
It is important that you learn how to properly attribute and acknowledge the work, data and ideas of others. Plagiarism is scientific misconduct, and students whose assessments can be shown to contain plagiarism are subject to penalties as outlined in the College's Misconduct Policy and Procedures.

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline
18. Appeal and Complaints Procedures
We have rigorous regulations in place to ensure assessments are conducted with fairness and consistency. In the event that you believe that you have grounds for complaint about academic or administrative services, or wish to appeal the outcome of an assessment or final degree, we have laid out clear and consistent procedures through which complaints and appeals can be investigated and considered:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline

19. Student Disciplinary Procedure
The College has the right to investigate any allegation of misconduct against a student and may take disciplinary action where it decides, on the balance of probabilities, that a breach of discipline has been committed. The general principles of the Student Disciplinary Procedure are available on the College website:

www.imperial.ac.uk/admin-services/secretariat/college-governance/charters/ordinances/students/

20. Intellectual Property Rights Policy
For further guidance on the College’s Intellectual Property Rights Policy is available on the College website:

www.imperial.ac.uk/students/enterprising-students/intellectual-property/

21. Use of IT Facilities
View the Conditions of Use of IT Facilities:

http://www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/staff-computers/conditions-of-use-for-it-facilities/

22. Animal research
Understanding the basic biology of infections, injuries and chronic diseases is an essential step in finding new treatments and cures. From cancer to malaria and war wounds to heart disease, research using animals forms an important element of Imperial’s work. The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College’s care are treated with full respect, and that all staff and students involved with this work show due consideration at every level.

For more information please see: www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research
23. Wellbeing and advice

Student Space
The Student Space website is the central point for information on health and well-being.

www.imperial.ac.uk/student-space

Work-life balance
The pace and intensity of postgraduate study at Imperial can be demanding so it’s important to find time for outside interests.

Support in your Department
Your Department has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time here. This includes:

Personal Tutor
Your Personal Tutor is your first point of contact for pastoral support and advice. You can arrange to have a meeting with them at any time during your studies (although most Personal Tutors will have set office hours or may require you to make an appointment) – what you discuss will be completely confidential. If necessary they will direct you to an appropriate source of support. Your Personal Tutor is usually a member of academic staff who is allocated to you for the duration of your programme to offer help and support with academic or personal issues. They will also follow your progress throughout the course to help keep you on track to succeed.

Your Personal Tutor will meet with you in groups termly during the year. The attendance of Personal Tutorials is compulsory. These are occasions where you can raise any areas of difficulty but these sessions will also be programmed to help you develop learning strategies.

Academic staff in the Department of Bioengineering are very active, internationally known, researchers. However, this may mean that they are not always in their offices, and so email is an excellent way to arrange appointments and to consult them on minor issues. In the event that the
problem is not resolved via this route, you may also want to consult the Senior Tutor, Deputy Senior Tutor or Director of Courses.

Additionally, as Bioengineering is a highly multi-disciplinary subject, your Personal Tutor may not always be able to answer all technical questions on modules outside their specialism, but they will happily put you in contact with someone who can - such as the appropriate lecturer or Module Leader.

Other members of the academic staff will generally make themselves available to discuss aspects of the module with which they are concerned. Please e-mail them to make an appointment.

Remember – your Personal Tutorials are timetabled and the attendance of them is compulsory.

**Support in your hall of residence**

If you’re staying in College accommodation you will have access to a range of support within your hall.

**Well-being support**

All halls have their own Residential Support team who are on call 24/7 to look after your wellbeing and maintain a friendly living environment so that all residents can study, sleep, relax and enjoy themselves. They also play an important part in the social life of the hall, organising a rolling programme of events to bring everyone together. This is supported by the Hall Activities Fund, which all residents contribute to at a rate of £2/week (in 2017/18).

The team includes a number of returning students, known as Hall Seniors, who can offer first hand advice on making the most of life at Imperial.

**Administrative support**

Each hall has a Hall Supervisor or a Reception team who oversee the day-to-day running of the residence. So if you have any enquiries or want to report a maintenance issue there are people on hand to help you.
You have access to a number of specialist advice services:

**Imperial College Careers Service**
The Careers Service has strong links to your Department and you will have a named Careers Consultant and Placement and Internship Adviser who will run both group sessions and individual meetings within your Department. You can arrange to meet with your linked Careers Consultant or Placement and Internship Adviser either in your Department or centrally on Level 5 Sherfield where the Careers Service is based.

Visit the Career Service’s website to:
- Book a careers appointment
- Find resources and advice on successful career planning
  
  [www.imperial.ac.uk/careers](http://www.imperial.ac.uk/careers)

**Department of Bioengineering Careers Adviser**
Students in the Department of Bioengineering can also seek advice and help with career planning from Robert Ferguson, the Department’s Industrial Liaison Manager. Robert Ferguson works with a wide range of companies in the medical technology, healthcare and biotechnologies industries in the UK, EU and internationally. He can help you with your career plans in the world of Bioengineering through:

- Weekly employer presentations from companies in the Bioengineering sector
- The annual Bioengineering Careers Fair
- A database of information about companies operating in the Bioengineering sector
- Company and sector information
- Advice about job search and finding internships or Year in Industry opportunities.
- Help with applications and interviews

You can find some specific information about careers in Bioengineering on the Department’s website at: [http://www.imperial.ac.uk/bioengineering/study/career/](http://www.imperial.ac.uk/bioengineering/study/career/).

Or if you have any questions or would like to arrange a meeting please contact Robert Ferguson directly: robert.ferguson@imperial.ac.uk.

**Student Hub**
The Student Hub represents a single point of contact for all key administrative information and support. The Student Hub team can help you with enquiries about:

- Accommodation (including checking contracts for private accommodation)
- Admissions
- International student enquiries
- Research degrees
- Student financial support
- Student records
- Tuition fees

Level 3, Sherfield Building, South Kensington Campus

020 7594 9444

[student.hub@imperial.ac.uk](mailto:student.hub@imperial.ac.uk)

[www.imperial.ac.uk/student-hub](http://www.imperial.ac.uk/student-hub)
Library and IT

Information and Communications Technologies (ICT)
If you’re having problems with technology (including computers, laptops and mobile devices), you can get help from ICT’s Service Desk.

📞 020 7594 9000
💌 www.imperial.ac.uk/ict/service-desk

Support with ICT
Any problems or queries relating to computing, including requests for new software, should be addressed first to ICT (service.desk@imperial.ac.uk), and to our IT Support Officer (Edit Toth, e.toth@imperial.ac.uk). To avoid infringement of licensing arrangements and to prevent the introduction of viruses, you are strictly forbidden to bring in programs from outside.

As long as you have completed Imperial’s online registration process, you can use your College credentials to get Microsoft Office 365 software for free. You can install the latest version of Microsoft Word, Excel, PowerPoint, OneNote and much more on up to five compatible PCs and Macs, plus five tablets, including iPad. All work can be saved online in OneDrive for Business, so it can be accessed no matter which device you use.

Rules for using the College network
The Information and Communication Technologies group (ICT) has very strict rules regarding the downloading of illegal, inflammatory, pornographic or obscene material on to computers connected to the campus network. Infringement of these rules can have very serious repercussions, including expulsion or legal proceedings being brought against students. You should be aware that the content and level of network traffic is monitored continuously. You should read the College’s Information Systems Security Policies, available at: http://www.imperial.ac.uk/admin-services/ict/self-service/be-secure/information-systems-security-policies/.

Software shop
The Software shop offers a variety of general and subject specific software programs and packages for free or at a discounted price for Imperial students.

🖥️ www.imperial.ac.uk/admin-services/ict/shop/software

Library services
The Central Library at South Kensington is open around the clock pretty much all year. Make sure you find out who your departmental librarian is as they’ll be able to help you find resources for your subject area. Also, don’t forget to check out the Library’s range of training workshops and our other campus libraries for access to specialist medicine and life sciences resources. Alongside these physical spaces and resources, the Library provides over 170,000 electronic books, journals and databases available both on and off campus and a free document delivery service to help you source books and articles from around the UK and the rest of the world:

🖥️ www.imperial.ac.uk/library

Religious support
The Chaplaincy Multi-faith Centre has chaplains from many different religions, as well as prayer rooms and information on places of worship. In addition, it runs meditation classes and mindfulness workshops for stress management. There is a student-run Islamic prayer room on campus and separate areas available for male and female Muslims.

🖥️ www.imperial.ac.uk/chaplaincy
Imperial College Union

The Union’s range of 375+ student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of ways for you to enjoy your downtime.

www.imperialcollegeunion.org/about-us

Physical Activity and Sport

Imperial College has a wide range of sports and activities on offer that cater for all standards and abilities. We have a recreational activity offer, competitive sports teams and an elite sport programme. We are dedicated to ensuring we have a diverse, inclusive and exciting offer for all.

For an annual fee of £30 per year you will be able to use the gym and swimming facilities on our campuses.

www.imperial.ac.uk/sport

Imperial College Union support

All Imperial students automatically become members of Imperial College Union when they register at the College. The Union provides a range of support:

Graduate Students’ Union

The Graduate Students’ Union is the postgraduate arm of Imperial College Union. The GSU works alongside the Imperial College Union President to ensure that the requirements of postgraduate students are catered for. It also organises a number of academic and social events during the year.

www.imperialgsu.com

Imperial College Union (ICU) Advice Centre

Imperial College Union runs the Advice Centre independently of the College with advisers on hand to provide free, confidential, independent advice on a wide range of welfare issues including housing, money and debt, employment and consumer rights, and personal safety.

www.imperialcollegeunion.org/advice

Student representatives

The Union have many different opportunities for student representatives to get involved with issues they care about, including Liberation Officers ensuring views of under-represented and interest groups are heard, Academic Reps and Wellbeing Reps.

If you have any feedback about issues in your department relating to academic or wellbeing issues you can speak to one of your student representatives.

https://www.imperialcollegeunion.org/your-union/your-representatives/a-to-z

Officer Trustees

The Union is led by a team of Officer Trustees who are elected every year by the students of Imperial College. They take a year out of their studies and work full-time at the Union, representing the voices of students in the Union, the College and the wider community.

The Officer Trustees represent students in a variety of roles, including Education, Welfare, Finance & Service and Clubs & Societies. These elected students are here to represent your views as a student body do make sure you get in touch with them if there’s something you would like to discuss or change.
26. Health and well-being services

NHS Health Centre and finding a doctor

Even if you’re fit and healthy we recommend that you register with a local doctor (GP) as soon as you arrive in London. For help finding your nearest GP see the Student Space website:

www.imperial.ac.uk/student-space/here-for-you/find-a-doctor

There is the Imperial College Health Centre on our South Kensington Campus which you may visit during clinic hours if you’re feeling unwell. Students living within the practice catchment area are encouraged to register with the Centre.

www.imperialcollegehealthcentre.co.uk

NHS Dentist (based in the Imperial College Health Centre)

Imperial College Dental Centre offers a full range of NHS and private treatment options.

www.imperial.ac.uk/student-space/here-for-you/dentist

Counselling and Mental Health

The Student Counselling and Mental Health Advice Service offers short-term counselling to all registered students. The service is free and confidential. Counsellors are available at the South Kensington, Hammersmith and Silwood Park Campuses.

www.imperial.ac.uk/counselling

Financial well-being

If you’ve got any questions about student financial support (loans, scholarships and research council studentships, US and Canadian loans) then contact the Student Financial Support team:

020 7594 9014
student.funding@imperial.ac.uk

If you suddenly find yourself in financial difficulties or experience an unexpected change in circumstances, you may be eligible to apply for emergency financial help through the Student Support Fund. The Fund offers a one-off payment of up to £2,000 to cover such emergencies as last minute accommodation and travel necessities, equipment and childcare. It does not have to be repaid.

www.imperial.ac.uk/students/fees-and-funding/financial-assistance/student-support-fund/

For tuition fees queries, contact the Tuition Fees team:

020 7594 8011
tuition.fees@imperial.ac.uk
27. Support for disabled students

Disability Advisory Service

The Disability Advisory Service provides confidential advice and support for all disabled students and students with specific learning difficulties.

If you think you may have dyslexia or another specific learning difficulty but have never been formally assessed, the Disability Advisory Service offers initial screening appointments.

Room 566, Level 5, Sherfield Building, South Kensington Campus

020 7594 9755
disabilities@imperial.ac.uk
www.imperial.ac.uk/disability

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020 7594 9755
disabilities@imperial.ac.uk
www.imperial.ac.uk/disability

Departmental Disability Officers

Departmental Disability Officers are the first point of contact within your department. They can apply for additional exam arrangements on your behalf, and will facilitate support within your Department.

In Bioengineering, Louise O’Sullivan is the Department Disability Officer.

(Tel: +44 (0)20 7594 9660, bg-ddo@imperial.ac.uk)

Your Disability Liaison Officer, Ms Louise O’Sullivan, is your first point of contact within your department and is there to help you with arranging any support within the department that you need. She is also the person who will apply for Special Examination arrangements on your behalf. You need to contact her without delay if you think that you may need extra time or other adjustments for your examinations.

More information on Departmental Disability Officers is available at:

www.imperial.ac.uk/disability-advisory-service/support/ddos

More information on procedures for the consideration of additional exam arrangements in respect of disability is available at:


At Imperial College London we recognise that studying at university can be a challenge, especially if you have a disability. We are keen that you have every opportunity to fulfil your potential and graduate with the degree you deserve. Therefore, it is important that you let us know about any disability, specific learning difficulty or health problem as soon as possible so that we can give expert advice and support
to enable you to do this. This service is strictly confidential between you and the relevant College personnel and support services.

Some people never think of themselves as having a disability, but students who have experienced any of the issues listed below have found that a little extra help and support has made all the difference to their study experience.

- Specific learning difficulties (such as dyslexia, dyspraxia, AD[H]D)
- Autistic spectrum disorder (such as Asperger’s)
- Deafness or hearing difficulties
- Long term mental health difficulties (such as chronic anxiety, bipolar disorder, depression)
- Medical conditions (such as epilepsy, arthritis, diabetes, Crohn’s disease)
- Physical disabilities or mobility impairments
- Visual difficulties


Disability Advisory Service

The Disability Advisory Service works with individual students no matter what their disability to ensure that they have the support they need. We can also help if you think that you may have an unrecognised study problem such as dyslexia. Our service is both confidential (information about you is only passed on to other people in the university with your agreement) and individual in that any support is tailored to what you need.

Some of the sorts of things we can help with are:

- Being an advocate on your behalf with others in the College such as your departmental liaison officer, Senior Tutor or exams officer, the accommodation office or the estates department
- Checking that your evidence of disability is appropriate and up-to-date
- Arranging a diagnostic assessment for specific learning difficulties
- Help with applying to the College for the cost of an assessment
- Help with your application for the Disabled Students Allowance (DSA) see below
- Helping students not eligible for the Disabled Students Allowance in obtaining support from other sources
- Help with arranging extra Library support
- Supporting applications for continuing accommodation for your second or later years

You can find about more about the Disability Advisory Service on the website at: http://www3.imperial.ac.uk/disabilityadvisoryservice

Disabled Students Allowance:

All home students who are UK residents, pay home fees and who have a disability are eligible to apply for a grant called the Disabled Students Allowance, which can pay any extra costs that are a direct result of disability. This fund is not means-tested and is also a grant not a loan you will not be expected to pay it back. Remember students with unseen disabilities such as mental health difficulties, learning difficulties or long term health problems are also eligible.
Support for international students

English language support
The Centre for Academic English provides free in-sessional English courses for international students while they are studying. These include classes and workshops on academic language, social language, the four skills of reading, writing, listening and speaking, 1-1 consultations with a tutor to work on a piece of academic writing or an oral presentation, self-study resources in the VLE Blackboard, and the Conversation Project, which partners students with a native-speaker volunteer to practise social and conversational English.

www.imperial.ac.uk/academic-english

International Student Support team
Students from outside the UK make up around half of our student population, so our International student Support team offers year-round support to help our international students settle into Imperial life. This includes UK visa and immigration advice and trips to different places of interest.

www.imperial.ac.uk/study/international-students

Visas
It is very important that you comply with all of the conditions of your visa.

If you need help or advice about visas and your visa conditions please contact the International Student Support team: https://www.imperial.ac.uk/study/international-students/visas-and-immigration/

Whilst in the UK on a student visa, you are required to comply with all of the conditions of your visa. This means that you must be engaged in full-time study for the duration of your visa. You should therefore be aware that if you need to take time out from your programme for any reason (e.g. an interruption of studies), you may be in breach of your visa conditions, unless you return home.

In addition, you should note that the UKVI require the College to monitor attendance for overseas students. Any student not in attendance at the College (e.g. missing meetings with their supervisor and/or group, etc.) will be reported to the UKVI via the College Registry. Students in breach of their visa conditions may face serious consequences, including refusal of British visas in the future.

The UK Visas and Immigration (UKVI) require students to collect their BRP within 10 days of arrival in the UK, from either the nearest approved Post Office (in the College’s case, High Street Kensington) or from the Registry team at the College. The pickup location depends on what the student has indicated in their visa application:

Students who select Imperial College as their location for collection will be emailed inviting them to book a slot so they can pick up their BRP which they should be able to slot around their Departmental induction activity and programme timetable. The collection point is likely to be Sherfield Building.

For further information, please get in touch with the College's International Student Support team.
The Student Records and Data Team are responsible for the administration and maintenance of the student records for all students studying at the College. This includes enrolments, programme transfers, interruption of studies, withdrawals and processing of examination entry for research degree students. The team also use this information to fulfil reporting duties to the Student Loans Company, Transport for London and the UKVI, as well as other external bodies.

The Team is responsible for the processing of student results and awards on the student record system as well as the production and distribution of academic transcripts and certificates of award.

The Student Records and Data Team produce a variety of standard document requests for both current and previous students including council tax letters, standard statements of attendance and confirmation of degree letters.

**Student records and examinations**

📞 +44 (0)20 7594 7268
✉ studentrecords@imperial.ac.uk

**Degree certificates**

📞 +44 (0)20 7594 8037
✉ certificates@imperial.ac.uk
30. Student feedback and representation

Feedback from students

The College and Union is committed to continually improving your education and wider experience and a key part of this is your feedback. Feedback is thoroughly discussed by your student representatives and staff.

We are committed to achieving and maintaining the highest standards in teaching on all programmes.

Programme quality

In the Department the Teaching Committee regularly review modules and take note of academic and peer review of lectures and classes.

Our Board of Examiners also have a role in ensuring the courses delivered are of a high quality. They undertake activities such as reviewing syllabi, lecture content, reading lists, coursework requirements, examination papers etc. Students from all years meet with the Board of Examiners once a year to present their views and opinions.

You can find out more about the role of external examiners on the website at: [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/external-examiners/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/external-examiners/).

At College level, high standards are maintained by the provision of staff development courses and the review of all taught components and formal examinations by the Programmes Committee. The programmes are subject to the College’s quality assurance processes.

Many of our programmes are reviewed in detail and at regular intervals by the Professional Engineering Institutions to ensure that the high standards required for professional accreditation are maintained.

Student feedback

As students of the Department, you have a very important role to play, by communicating directly with members of staff or via Year or Departmental Representatives. As a cohort, you will be asked to elect year representatives who will sit on the Staff-Student Committee, work with the Departmental Student Representative, and provide valuable feedback. You can find out about the Staff-Student Committee on the website at: [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/staff-student-committee/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/staff-student-committee/).

Formal routes by which students are involved in course evaluation are in the Staff-Student Committee, which meets once a term, and in your completion of surveys. You will be given more information about how to complete these surveys later in the term. The surveys give you the opportunity to comment anonymously on the modules and the lecturers. It is very important that these are completed, since the feedback that they give to us is invaluable in improving the degree programme for you. Informally you are welcome to speak to lecturers, your Personal Tutor, the Academic Tutor or the Student Office. You can raise issues at any time – you don’t have to wait for the SSCM.

Ultimately - if there is something wrong please tell the Academic Tutor or the Student Office as soon as possible, so that we can fix it.

The Department’s “You Said, We Did” Campaign

You can find out more about what the Department has changed in response to student feedback by looking at our You Said, We Did webpage at: [http://www.imperial.ac.uk/bioengineering/admin/current-pgt/you-said-we-did/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/you-said-we-did/).

The Union’s “You Said, We Did” Campaign

You can find out more about some of the changes that have been made as a direct result of student feedback online, at [https://www.imperialcollegeunion.org/you-said-we-did](https://www.imperialcollegeunion.org/you-said-we-did).
**Student representation**

Student Representatives are recruited from every department to gather feedback from students to discuss with staff. More information about the role, and instructions on how to become an academic representative, are available on the Imperial College Union (ICU) website.

[www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview](http://www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview)

**Staff-Student Committee**

Staff-Student Committees are designed to strengthen understanding and improve the flow of communication between staff and students and, through open dialogue, promote high standards of education and training, in a co-operative and constructive atmosphere. College good practice guidelines for staff-student committees are available here:

[www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback](http://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback)

In the Department of Bioengineering, the Staff Student Committee meetings serve as platform of exchange of students’ experience in the programmes; and for compiling the students’ complaints and suggestions. Staff also report implemented changes back to the students. In addition, all information is collected by the Student Union in order to present a global view of the College. Further, relevant issues raised at SSCM are discussed at the Departmental Teaching Committee Meeting, where academic staff discuss solutions.

Students from every year group of each degree programme are elected annually to serve as representatives. This could be you!

More details can be found here:

[http://www.imperial.ac.uk/bioengineering/admin/current-pgt/staff-student-committee/](http://www.imperial.ac.uk/bioengineering/admin/current-pgt/staff-student-committee/)
31. Student surveys

Your feedback is important to your department, the College and Imperial College Union.

Whilst there are a variety of ways to give your feedback on your Imperial experience, the following College-wide surveys give you regular opportunities to make your voice heard:

- PG SOLE lecturer/module Survey or departmental equivalent
- Student Experience Survey (SES)
- Postgraduate Taught Experience Survey (PTES) – Spring 2019
- The PG SOLE lecturer/module survey runs at the end of the autumn and spring terms. This survey is your chance to tell us about the modules you have attended and the lecturers who taught them.

For PG SOLE your lecturers will receive their individual numerical results and comments shortly after the survey closes. To make the most of your opportunity to give your feedback, please do not use offensive language or make personal, discriminatory or abusive remarks as these may cause offence and may be removed from the results. Whilst this survey is anonymous, please avoid self-identification by referring to personal or other identifying information in your free text comments.

The Student Experience Survey (SES) is another opportunity to leave your views on your experience. This survey will cover your induction, welfare, pastoral and support services experience.

The Postgraduate Taught Experience Survey (PTES) is the only national survey of Master's level (MSc, MRes, MBA and MPH) students we take part in. This is the only way for us to compare how we are doing against the national average and to make changes that will improve our Master's students’ experience in future. PTES covers topics such as motivations for taking the programme, depth of learning, organisation, dissertation and professional development.

All these surveys are anonymous and the more students that take part the more representative the results so please take a few minutes to give your views.

As a result of feedback to previous surveys, we have made a number of changes. Some examples of these are given on the Department’s “You Said, We Did” webpage: http://www.imperial.ac.uk/bioengineering/admin/current-pgt/you-said-we-did/.

The Union’s “You Said, We Did” campaign shows you some of the changes made as a result of survey feedback:

- www.imperialcollegeunion.org/you-said-we-did

If you would like to know more about any of these surveys or see the results from previous surveys, please visit:

- www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys

For further information on surveys, please contact the Registry’s Surveys Team at:

- surveys.registriesupport@imperial.ac.uk
Alumni services
When you graduate you will be part of a lifelong community of over 190,000 alumni, with access to a range of alumni benefits including:

- discounts on further study at the College and at Imperial College Business School
- alumni email services
- networking events
- access to the Library and online resources
- access to the full range of careers support offered to current students for up to three years after you graduate
- access to our Alumni Visitor Centre at the South Kensington Campus, with free Wifi, complimentary drinks, newspapers and magazines, and daytime left luggage facility

Visit the Alumni website to find out more about your new community, including case studies of other alumni and a directory of local alumni groups in countries across the world.

www.imperial.ac.uk/alumni

Staying in touch
It perhaps seems a bit early to think about becoming an alumnus of the Department when you have only just arrived. However it will come around sooner than you think!

We really value all of our alumni and hope you will stay in touch with us as part of a lifelong connection, as part of the College’s global community of over 180,000 alumni.

As a current student, you can find out about what alumni from the College do now by reading some case studies online: http://www.imperial.ac.uk/careers/resources/case-studies/alumni-case-studies/. You can also find out more about alumni of the Department in the on the website at: http://www.imperial.ac.uk/bioengineering/people/alumni/alumni-spotlight/.

Attending Departmental and College events, public engagement events and other networking opportunities is also a good idea if you are interested in meeting alumni and expanding your network.

Opportunities for further study
After you have completed your MSc Biomedical Engineering degree, you may choose to continue your studies either at Imperial or elsewhere. Previous graduates have gone on to study for different Master of Science (MSc), Master of Research (MRes), or doctorate (PhD) awards both in the Department of Bioengineering and elsewhere.