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1.1 Welcome to Imperial

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 very much a part of this community of discovery and we hope you will take this opportunity to make your own unique contribution.

We understand that this is a challenging time for our student community due to the impact of coronavirus and we are committed to providing you with the very best academic resources to help you reach your true potential. Information on teaching and learning, services and facilities to support the wider student experience during the Covid-19 pandemic can be found on the College’s webpages, alongside local information provided by your Department.

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.

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 360 clubs, societies and projects is one of the largest of any UK university, making it easy to do something different with your downtime. Access to the gym and other sporting facilities will be dependent on government guidance. We are working to ensure that you have access to a variety of resources online to support your health and wellbeing if there are restrictions.

1.2 Welcome from the Head of School

I welcome you becoming a new member of our School and of Imperial College. You join us at a very unusual and challenging time. The COVID-19 pandemic has forced us to deliver your education in a way that we never expected. I want to assure you that, despite the pandemic, all staff in the Dyson School of Design Engineering are working hard to ensure that you receive the high quality education that we promised.

The MEng programme in Design Engineering helps you develop a diversity of skills and expertise. We are excited at the opportunity of working with you over the coming years as you enter the world of design engineering and contribute towards the development of society and the domain.

This document serves a number of purposes including helping to introduce you to key information which will be helpful during the welcome week and as you settle in. In addition the document provides an overview of the MEng programme in Design Engineering which will be useful throughout your degree programme. The document has been developed with input from several staff members and is updated regularly so do source the online version for the latest information.

As a student of Imperial College London, the Students’ Union, fellow students, social media and staff are all part of your new network and we encourage you to engage with all of these, and we also encourage you to seek out the staff with your queries – it’s what we are here for.

Welcome to the MEng in Design Engineering.

All the best,
Professor Peter Cheung
Head of Design Engineering
1.3 Meet the School Teaching Staff

Prof. Peter Cheung  
Head of School  
p.cheung@imperial.ac.uk

Dr Marco Aurisicchio  
Reader in Engineering Design  
m.aurisicchio@imperial.ac.uk

Dr Weston Baxter  
Senior Lecturer  
weston.baxter@imperial.ac.uk

Maria Apud Bell  
Senior Teaching Fellow  
maria.apud-bell@imperial.ac.uk

Dr David Boyle  
Senior Lecturer  
david.boyle@imperial.ac.uk

Prof. Rafael Calvo  
Chair in Engineering Design  
r.calvo@imperial.ac.uk

Dr Michel-Alexandre Cardin  
Senior Lecturer in Computational Aided Engineering  
m.cardin@imperial.ac.uk

Prof. Peter Childs  
Chair and Leader in Engineering Design  
p.childs@imperial.ac.uk

Dr Sam Cooper  
Senior Lecturer  
samuel.cooper@imperial.ac.uk

Dr Pelin Demirel Liu  
Senior Lecturer  
p.demirel@imperial.ac.uk

Prof. Sebastian Deterding  
Chair in Design Engineering  
s.deterding@imperial.ac.uk

Dr Elena Dieckmann  
Senior Teaching Fellow  
elena.dieckmann13@imperial.ac.uk

Dr Mark Friddin  
Imperial College Research Fellow  
m.friddin@imperial.ac.uk

Dr Chandramohan George  
Lecturer  
chandramohan.george@imperial.ac.uk

Dr Mazdak Ghajari  
Senior Lecturer  
m.ghajari@imperial.ac.uk

Dr Stephen Green  
Principal Teaching Fellow  
stephen.green@imperial.ac.uk

Dr Hamed Haddadi  
Reader in Human-Centred Systems  
h.haddadi@imperial.ac.uk

Eva-Maria Kirchberger  
Senior Teaching Fellow  
e.kirchberger@imperial.ac.uk
2. Key Contacts
### 2.1 School Officers

Most of our academic staff are engaged in teaching. There are a few you will see and hear from more often. Staff can be away from the office therefore where possible, contact the person you wish to speak with via email in advance to arrange an appointment.

**Head of School (HoS)**
Professor Peter Cheung

The Head of School is responsible to the University for all of the School’s activities, both teaching and research.

1M12, RCS1 Observatory Building  (access via Teaching Office 1M10)
p.cheung@imperial.ac.uk

**Director of Undergraduate Studies (DUGS)**
Dr Shayan Sharifi, Dr Freddie Page

The DUGS is / are responsible for the undergraduate programme/s in the School.

Floor 1, Dyson Building
de-dugs@imperial.ac.uk

**Senior Tutors**

Dr Talya Porat  
Senior Tutor  
1M06, RCS1 Obsv. Bldg.  
t.porat@imperial.ac.uk

Dr Nicolas Rojas  
Deputy Senior Tutor  
1M07, RCS1 Obsv. Bldg.  
n.rojas@imperial.ac.uk

The Senior Tutors are responsible for the welfare and academic progress of undergraduate students in the School.

**Academic Tutor**
Dr Stephen Green

The Academic Tutor is responsible for ensuring that our students’ academic experience is optimal and continually improving.

Floor 1, Dyson Building  
stephen.green@imperial.ac.uk

**Departmental Disability Officer**
Lucie Richards

The School Disability Officer is your first point of contact if you have a physical or learning disability that requires additional support such as special exam arrangements (see section 4.9 below).

Teaching Office, 1M10 RCS1 Observatory Building  
lucie.richards@imperial.ac.uk

**Examinations Officer**
Dr Michel-Alexandre Cardin

The Exam’s Officer oversees all exams across the School. The Exam Board consists of every academic member of staff and the External Examiners.

1M03, RCS1 Observatory Building  
m.cardin@imperial.ac.uk

**E-Learning Officer**
Dr Petar Kormushev

The E-Learning Officer oversees the School’s implementation and use of e–learning tools such as the Blackboard VLE (see section 3.1), MS Teams, Panopto recording system, WebPA and attendance systems.

1M07, RCS1 Observatory Building  
p.kormushev@imperial.ac.uk

**School Safety Officer**
Dr Connor Myant

The School’s Safety Officer is responsible for the safety of teaching and research in the School. If you have questions or concerns regarding Health and Safety, please contact the Safety Officer directly.

1M05, RCS1 Observatory Building  
connor.myant@imperial.ac.uk
2.2 Year Coordinators

Year Coordinators are responsible for the planning and implementation of each year’s curriculum and activities.

**Year 1 Coordinator**
Dr Lorenzo Picinali
Floor 1, Dyson Building
l.picinali@imperial.ac.uk

**Year 2 Coordinator**
Dr Nan Li
1M05, RCS1 Observatory Building
n.li09@imperial.ac.uk

**Year 3 Coordinator**
Dr Mazdak Ghajari
1M05, RCS1 Observatory Building
m.ghajari@imperial.ac.uk

**Year 4 Coordinator**
Dr Billy Wu
1M04A, RCS1 Observatory Building
billy.wu@imperial.ac.uk

2.3 Personal Tutors

A member of staff who will act as your Personal Tutor. You will meet them regularly during the session, in groups and/or individually, to discuss both academic progress and personal topics. You will find the name and email address of your Personal Tutor during our first week. The details shall also appear in your timetable.

**First year of study**
You and your group will be meeting your Personal Tutor four times during the Autumn and Spring Terms, and three times during the Summer Term.

**Other years of study**
If you are in the second, third or fourth year, you will be meeting your Personal Tutor three times during each of the three terms. These meetings will be timetabled, and you will receive information about days, times and locations during the welcome week.

**Individual Meetings**
If you are in need of an individual meeting with your Personal Tutor, you can contact them via email and arrange for a day, time and location. Please do feel free to do this, as the information that your Personal Tutor can supply about your general progress throughout your time here, and any special difficulties you might have experienced can be of benefit to you when decisions affecting your future have to be made. They may also write you reference letters.

If, for whatever reason, you are unable to contact or establish a good rapport with your Personal Tutor, please talk to the Senior Tutors (see preceding page) who may be able to help resolve this.

2.4 Teaching Office

The Programme Administration team are known as the Teaching Office and are here to answer your general queries. You will find them on the Third Floor of the Dyson Building. They will contact you with information during the course of your studies.

**IMPORTANT**
It is important that you read emails from the Teaching Office. They will contain key information you will need to know about your classes and assessments.

The Teaching Office Team are present* Monday – Friday 1000–1600 during term time. You are welcome to visit (drop in is fine, no appointment necessary) or email us individually as below, or via design.engineering@imperial.ac.uk.

**Senior UG & PG Administrator**
Momo Rahim
Teaching Office, 1M10 RCS1 Observatory Building
m.rahim@imperial.ac.uk

**UG and PG Administrators**
Caroline Bellingham
Teaching Office, 1M10 RCS1 Observatory Building
c.bellingham@imperial.ac.uk

Lucie Richards
Teaching Office, 1M10 RCS1 Observatory Building
lucie.richards@imperial.ac.uk

**Resources Administrator**
Sophie Sykes
Teaching Office, 1M10 RCS1 Observatory Building
s.sykes@imperial.ac.uk

*REMOTE WORKING DUE TO CORONAVIRUS*
Between the Teaching Office team, we are available Monday to Friday but are working alternately in the office and from home, therefore not all colleagues are in the office each workday, but we are here to help you so please contact us via email when we are not present in the office. Our days in will be posted by our office.

2.5 Senior Tutors

The Senior Tutors are responsible for the welfare and academic progress of all undergraduate students in the School and work with student representatives to ensure the course is running smoothly. They can offer personal advice and help to any student on both academic and
non-academic matters. The Senior Tutors are also on call during vacations but if for any reason they are unavailable, or you are unsure about who to talk to on a particular issue, please ask a member of the Teaching Office (see above) and they can relay who is best able to help you.

One responsibility of the Senior Tutor team is to maintain records for each student so that, for example:
- You can be notified of your examination results
- You can provide evidence of problems such as ill health, for it to be presented to the Board of Examiners.

Your student file is strictly confidential to the Senior Tutors and their team; no-one else is allowed to consult it.

### 2.6 Faculty Senior Tutor

In the event of an issue arising within your department there are a number of avenues for you to seek support. This will include, depending on your department, your Undergraduate Senior Tutor(s) and your personal tutor, and in some departments, other designated staff such as year tutors or degree coordinators.

There are a number of avenues within the College to seek help with academic and pastoral matters: [http://www.imperial.ac.uk/student-support-zone](http://www.imperial.ac.uk/student-support-zone).

In the event that you would like to seek additional support or guidance, or that you wish to air your issues in confidence, the Faculty Senior Tutor, Dr Lorraine Craig, can be contacted by email [l.craig@imperial.ac.uk](mailto:l.craig@imperial.ac.uk) in the first instance.

Depending on the nature of your query, it may be passed onto other more relevant staff.

### 2.7 School Wellbeing Advisor

Sophie Hughes, Student Wellbeing Advisor

[sophie.hughes@imperial.ac.uk](mailto:sophie.hughes@imperial.ac.uk)

I am the Student Wellbeing Advisor and I am here to offer you wellbeing support within the department. I am available to speak to on a confidential 1:1 basis.

Students can come and see me for a wide range of reasons; if you’re feeling stressed, lonely, overwhelmed, anxious, low or depressed, if you’re experiencing relationship and friendship worries, problems at home, grief, substance misuse, stress or anxiety about workload and exams, or if you have worries about your plans for after Imperial.

There is no obligation, and no commitment; it can be just a one-off chat to discuss how you’re feeling, or it may be that you would like some ongoing support. I can also signpost to another person or organisation, either within College or externally. I offer face to face or remote appointments. If you would like to have a chat please [email me](mailto:sophie.hughes@imperial.ac.uk) and we can arrange a time. My usual working days are Monday, Tuesday, and Wednesday.

Alongside the 1:1 support my role also includes developing wellbeing resources (see below), leading workshops and working with elected student wellbeing reps to ensure you have the tools to look after your wellbeing.

MS TEAMS DesEng WELLBEING AREA - RESOURCES AND WORKSHOPS

We have grouped support information for students on a dedicated MS Teams area linked to below. This is one of a series of initiatives to help make connecting easier during any pandemic related remote working.

[DesEng Wellbeing Team - AE Team, Wellbeing Workshops: https://teams.microsoft.com/l/](https://teams.microsoft.com/l/)
3. School Comms
Our primary channels for maintaining contact with you is via your Imperial College e-mail, by the Virtual Learning Environment (VLE), Blackboard and Microsoft Teams.

3.1 Blackboard

Module info
Within Blackboard you will be able to find an area for each of the modules you are currently enrolled in. In each module area you will find information and materials about the specific module, such as:
- module handbook;
- lecture recordings (via ‘Panopto’; see section below)
- exercise and tutorial notes
- announcements
- tests
- videos
- marking scheme, etc.
- your grades

How to Login
You will be able to login into Blackboard using your Imperial College credentials via: https://bb.imperial.ac.uk.

Blackboard App
There is also a Blackboard app available on all platforms. You are strongly advised to download this if you have an appropriate device (OSX / Android).

IMPORTANT
We post information to Blackboard regularly, so please check it frequently.

Design Engineering Information
In the Blackboard homepage, on the right side under ‘My Organisations’, you can find the ‘Design Engineering Information’ organisation page. This has a number of sections that contain useful links and documents:

‘UG resources’:
- UG Staff–Students Consultative Committee (SSCC) minutes and agenda
- Remote Working / Assessment Guidance Material
- Mitigating Circumstances information
- Latest version of this handbook
- Useful Contacts
- Your Assessment deadlines
- Study Skills

‘Competitions and Opportunities’
- The latest competitions and placements opportunities are all listed here.

‘Available Workshops’
- This lists various training and workshops available to you.

3.2 College Email

The email address issued to you on registration will remain active for one year after you leave Imperial.

You can use this address freely to communicate with other students, staff and people outside the College. We try to email you no more than necessary, but messages will still be necessary and some of these will be very important and, possibly, urgent.

Re-directing Imperial email to a non–Imperial address:
If necessary, College ICT can redirect your mail to a colleague or to a non–Imperial email address (see Computers section for instructions).

Set Up Email Forwarding (link)

IMPORTANT
You must check your e-mail regularly for incoming messages. Any failure to read important communications will not be accepted as grounds for mitigation.

3.3 Microsoft Teams

A communication/collaboration platform that’s integrated with Microsoft’s other products such as Office 365. It includes video conferencing features that can be enabled via Outlook calendar entries or from MS Teams ‘teams’. Use Teams to:

- Create collaboration space with teaching staff and fellow students
- Chat with students and teaching staff
- Share files, links
- Video/audio calls with option to record

Access via https://teams.microsoft.com/ and log in with your Imperial username and password.

REMOTE TEACHING DUE TO CORONAVIRUS
MS Teams is the College’s adopted platform for video calling and collaboration. During the pandemic, College staff and students have used MS Teams as a means of communication when working remotely. In this academic year you can expect teaching to employ both Blackboard and MS Teams towards delivery.
3.4 Late or Absent Teaching Staff

If no lecturer or tutor is present for a timetabled class, check your timetable to find out who should have been there, then please use the teaching staff lists to contact them directly and/or by email or phone. If this action fails to deliver, contact the Teaching Office and/or a Senior Tutor. Any staff member who has been given leave of absence will have provided the office with details of substitute staff who can cover each teaching duty. It may be this substitute who is missing.

If neither the timetabled staff member nor the substitute can be found, the activity will normally have to be re-scheduled. Such instances are rare, and we are sorry where they do occur. Avoiding this outcome is to the benefit of everyone.

Please feel free to give us feedback and raise questions. If you have an issue and let us know, the School can seek to address the matter in a timely fashion.

3.5 Lecture Recordings

Some of the lectures given in teaching spaces are equipped with Panopto, a system through which a lecturer and their presentation is recorded. Panopto videos can be viewed directly via the course Blackboard page or the general Panopto page. On other occasions, recordings will be made via MS Teams, and remain in that Teams area for future referencing.

Note
If a session is being recorded and for any reason you do not wish to be part of that recording, please sit ‘off-camera’ (ask the lecturer if you are in doubt) and reserve your questions for the lecturer til after the recording has ended.

Many students find lecture videos a valuable resource for review and revision. However, a recording cannot possibly replace the shared learning experience of the live lecture, and cannot be relied on for completeness. Occasionally, video captures can also fail.

IMPORTANT
It is the School’s intention to make lecture recordings whenever the facilities allow this. However not all College teaching spaces are fitted with the necessary facilities, so you must not rely on being able to view recordings.

IMPORTANT
Lecture recordings are provided only for personal use by registered Imperial College students, and only for your personal educational purposes.

Any redistribution (e.g. via social media), sharing via any means, editing or re-use of a lecture video will be treated as misconduct and handled as a disciplinary matter under the Code of Student Discipline.

Login to Panopto video site
Guidelines on audio and video lecture recordings
Code of Student Discipline

3.6 Your Timetable

Your timetable will automatically appear in your Imperial College Outlook calendar and remain in sync with updates.

The easiest and most reliable way to view your calendar is via iCalendar.

iCalendar (link)

Timetables are subject to periodic changes so you should get into the habit of checking your timetable regularly.

Whilst the majority of teaching activity is between 10:00-17:00 Monday–Friday during term time (except Wednesday afternoons and your year’s Horizon slot; see 4.3 below), teaching events can be scheduled between 09:00 - 18:00.

If you have issues with events not feeding through to your Imperial calendar, please contact the Teaching Office on design.engineering@imperial.ac.uk.

REMOTE TEACHING: MS TEAMS
To facilitate remote teaching events such as lectures and tutorials, we shall be using MS Teams. Modules will have MS Teams areas for video meets, lecture streams, chat and file sharing. Teaching events in your calendars will link to the relevant MS Teams areas.
4. Academic & Pastoral Support
4.1 Support for Academic Transition

Students joining Imperial are all academically able, but come from a wide range of secondary education cultures. Adjusting to the challenge of higher education can be tough, and we offer some resources to support you.

Please take time to explore the Imperial Success Guide site. This was put together from a vast amount of collective experience — above all that of many students who were asked what was needed to empower and support them as they started university. The guide brings together information on effective study, assessments and feedback, well-being, workshops and support to ensure that you know where to look for advice and guidance on study skills.

The Imperial Success Guide

4.2 English Classes

The undergraduate course involves a substantial amount of reading and writing, as well as oral presentations. Fluency in English is vital if you are to be successful in the course. The Centre for Academic English runs a series of English classes in the evenings for students who need tuition and practice.

IMPORTANT
Failure to attend these classes could result in you not understanding the lectures and underperforming or failing assessments (i.e. projects, end-of-Term exams, essays and reports, etc.)

Centre for Academic English

4.3 Imperial Horizons

Looking to get the most out of your degree? Imperial Horizons is a programme designed to broaden your undergraduate education, inspire your creativity and enhance your professional impact. The courses are popular and highly rated by students: make your choice and sign up quickly!

You can choose from more than 20 different course options in the following four fields of study:
- Business & Professional Skills
- Global Challenges
- Science, Culture and Society
- Languages and Global Citizenship

Key benefits
- Give yourself a unique edge - These courses will give you opportunities to develop your skills in communication, problem-solving and teamwork.
- Make your degree transcript stand out - Imperial Horizons courses are included on your degree transcript as a valuable selling point for employers.

Study for free during normal teaching hours
All Departments have set aside time for Imperial Horizons:
- 1st Years: 16:00–18:00 on Tuesdays
- 2nd Years: 16:00–18:00 on Mondays
- 3rd & 4th Years: 16:00–18:00 Thursdays

IMPORTANT
First years must register their course preferences on the Imperial Horizons website during Welcome Week, before the deadline of Monday 07 October 2019. Imperial Horizons is a set of extracurricular and non-compulsory activities that are not credited towards your degree.

Info on Imperial Horizons Courses (link)

4.4 Evening Classes

The Centre for Co-curricular Studies offers evening classes in a broad selection of subjects outside science and technology, such as languages and humanities. Fees are normally due, but these will be considerably less than the equivalent classes held privately.

Information on evening classes (link)

4.5 Central Library

The College’s Central Library is next to the Sherfield Building. It provides access to high quality resources including electronic journals, databases, textbooks, print journals and maps. Computer workstations and wireless access to the College computing network are also available.
More information is available on the library’s website, and new students receive a Library induction course in the first week of term.

The School has a dedicated librarian to guide and support your access to central library resources. They maintain a web page with a blog and hold office hours for consultation (see the web page for details).

Nicole Urquhart – Design Engineering Librarian
Room 110 Central Library
Ext. 41889
n.urquhart@imperial.ac.uk

School librarian’s web page
Library website

4.6 Guidance for the Acknowledgement of Contributions to Project Work

In addition to any stipulations regarding acknowledgement of work given by Imperial College London (and the Royal College of Art for GID and IDE) in relation to your degree, please see the following note.

Project work often benefits from input from others, be it general advice and guidance, problem solving, coding and bug fixing, to assist with practical work. Some projects benefit from collaborative efforts on specific aspects. Some project builds benefit from input from a prototyping company or sponsor. The leverage of resource in a project can demonstrate the ability to collaborate and operate effectively. In Design Engineering we have seen many diverse forms of input to a project that are helpful and reflect well on a student’s, or group of students’, ability to deliver an effective project outcome.

As your projects are part of an educational pathway, we consider it essential and professional to acknowledge the input of others, outside general advice and guidance given by the staff team, in any form to your projects. A practical way of doing this is to include a clear printed acknowledgement of input to specific aspects of your project in your presentation materials.

This could take the form of a poster on a show display, an acknowledgement page in a report or an acknowledgements slide in a presentation. If you have limited space available in a presentation, you could give credit in the given context, by, for example, giving the name of a collaborator on the same slide you are presenting a particular aspect of your project to which someone else or another organisation has contributed.

Acknowledgement of input from some other party is not likely to detract from your project but may actually augment the overall impression you give, showing that you give credit to others and are not taking credit for yourself for aspects you have not actually done.

Please also remember that you will likely be asked to demonstrate mastery of relevant topics in assessments of your projects. Acknowledgement of which aspects you have been fully engaged with, and those you have not, in a project can aid the focus of attention on these in an assessment. The following links provide the current policy on academic integrity:

Examination and Assessments: Academic Integrity
Examination and assessments

4.7 Interruption of Studies

The DE MEng programme, its examination and assessment structure and its marking scheme are designed for continuous attendance. Interruption of Studies allows students to take a break from studies where circumstances warrant such action. The range of typical circumstances and further details are here: https://www.imperial.ac.uk/student-support-zone/advice/my-student-status/interrupting-your-studies/.

Taking Interruption of Studies has implications for International students with Tier 4 visas. Please liaise with the Teaching Office who can put you in touch with the right department, or see this link: https://www.imperial.ac.uk/study/international-students/.

If you wish to take a break from your studies, the steps are as follows:

1. If you so wish, you may first discuss the matter informally with the School Wellbeing Advisor (see 2.7 above), otherwise please discuss the matter with your Personal Tutor;
2. You (or in some instances your Personal Tutor will instigate) should then contact the Senior Tutor, who shall send you an interruption of studies form. There are sections for you and your Personal Tutor to complete. If relevant, supporting documentation can be added to it;
3. Send your completed interruption of studies form, and evidence where relevant, to the Senior Tutor;
4. We will then get back to you with a decision on your request;
5. For approved requests, you’ll be asked to visit the My Imperial student portal to initiate the interruptions process formally. From there, you can track progress.
4.8 Transferring

The School recognises that there may be instances where Imperial students identify another Imperial programme of study that appears to more closely fit their needs, leading to them considering transferring. Whether that is out of or into the School, the details and process are as follows:

1. NB: Successful transfers into a programme are normally from the beginning of the first year of study;
2. NB: Imperial Departments/Schools seek to establish that candidates seeking to transfer have achieved at least 60–65%* in their current programme thus far (including the current year of study of their existing programme, which ordinarily must be completed);
3. Students are encouraged to discuss the matter informally with their assigned Personal Tutor in the first instance. If there are any reasons of a personal nature and/or mitigating circumstances, they may also / alternatively wish to speak with the Senior Tutors listed under 2.1 above;
4. Students wishing to proceed should liaise with the DUGS as listed under 2.1 above to seek formal permission to be released**;
5. Students can make contact with their intended Department/School to enquire about transferring in**;
6. Once agreed, the transfer shall be communicated by both or either Department/School to College Registry who will review the request and then reply, citing any relevant terms and conditions. A response from Registry confirming the transfer signals the arrangement being formally agreed and will specify dates and other relevant details.

* For prospective Imperial students seeking to transfer into the School, please note we will only accept students that have passed all modules and achieved 65% or above in their current course.

** These steps may occur in the opposite sequence to that shown and is something we leave to students to decide as they see fit.

https://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/changes-to-registration-status/

4.9 Wellbeing

Please also refer to section 11 below.

The School has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time at Imperial.
Adjustment” document for you to share with your department which outlines all your support needs and we will fund any additional support agreed by your DAS Advisor. This could include funding for:

- note taking, specialist study skills or mentoring support.
- disability related equipment (note: excludes computers)
- other additional support, for example taxi fares for those who need help with transport.

A disability is any long-term condition that has a substantial impact on your ability to study effectively for example:

- a specific learning difficulty, e.g. dyslexia, dyspraxia
- an enduring mental health condition, e.g. depression, OCD, generalised anxiety disorder etc.
- a visual, hearing, or other sensory impairment
- a long-term medical condition, e.g. IBS, ME, diabetes
- a social/communication difficulty, e.g. autistic spectrum/Asperger’s syndrome
- a mobility or dexterity impairment

You can book an appointment by dropping in to the office, phoning or sending an email:

The Disability Advisory Service,
Room 566, Level 5,
Sherfield Building
020 7594 9755
disabilities@imperial.ac.uk

[Disability Advisory Service (link)]

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

Please see section 2.1 School Officers for details of the School’s Disability Liaison Officer. More information on Departmental Disability Officers is available at:

[Departmental Disability Officers (link)]

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

[Exam arrangements and disability (link)]

**In your hall of residence**
If you’re staying in College accommodation you will have access to a range of support within your hall. All halls have a Hall Warden 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. Your rent includes a contribution towards your halls activity fund.

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

Each hall also 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.

Your health, safety and wellbeing are our top priority in halls of residence. We have made a number of changes in response to COVID-19, so that we can ensure our residents are safe, secure and comfortable and can comfortably adhere to social distancing guidelines. This will include staggered arrival times, clear self-isolation procedures, and amendments to corridor and communal space usage.

More information and the latest guidance around accommodation can be found at:
[www.imperial.ac.uk/study/campus-life/accommodation](http://www.imperial.ac.uk/study/campus-life/accommodation)

**Student Hub**
At the Student Hub, you can access advice about accommodation, admissions and financial support and get help with international student enquiries, questions about student records, exams and the Undergraduate Research Opportunities Programme (UROP).
[www.imperial.ac.uk/student-hub](http://www.imperial.ac.uk/student-hub)

**Student Support Zone**
Student Support Zone has lots of information about the resources available at Imperial and beyond to help you to stay healthy and happy. It’s a great place to start when you’re looking for some support – it covers advice about housing and money, health, wellbeing and maintaining a good work-life balance, and provides the details of who you can contact if you need some extra support.
[www.imperial.ac.uk/student-support-zone](http://www.imperial.ac.uk/student-support-zone)

**Useful support contacts**

**Health and wellbeing**
If you have moved home to take up your place at Imperial you will need to register with a new doctor (also known as a General Practitioner or GP) so that you can access NHS healthcare. It’s important that you register with a doctor soon after you arrive – don’t wait until you are sick, as this could delay your access to treatment.
Imperial College Health Centre
40 Prince’s Gardens, South Kensington Campus
020 7584 6301
imperialcollege.hc@nhs.net
www.imperialcollegehealthcentre.co.uk

Imperial College Dental Centre
Prince’s Gardens, South Kensington Campus
020 7589 6623
www.imperialcollegedental.co.uk

Student Counselling and Mental Health Advice Service
020 7594 9637
counselling@imperial.ac.uk
www.imperial.ac.uk/counselling

Multi-Faith Chaplaincy Service
Chemistry Building, South Kensington Campus
chaplaincy@imperial.ac.uk
www.imperial.ac.uk/chaplaincy

International students’ support
Centre for Academic English
Level 3, Sherfield Building, South Kensington Campus
english@imperial.ac.uk
www.imperial.ac.uk/academic-english

International Student Support team
020 7594 8040
www.imperial.ac.uk/study/international-students
5. Assessment
5.1 Passing the Year

The Design Engineering MEng programme consists of four successive, one academic year parts. Progression (and ultimately award) is contingent on passing the year/s. To pass a module, you must achieve a 40% weighted average for the entire module (that is to say you could achieve less than 40% for coursework, but then compensate that with a good exam or vice versa).

5.2 Mitigating Circumstances

What are mitigating circumstances?
These are circumstances beyond your control that may prevent you from sitting an exam, delivering an assessed presentation or submitting coursework on time, or may seriously affect your performance in assessments.

What should you do if you have mitigating circumstances?
You are advised to inform the Senior Tutor and your Personal Tutor (see sections 1.3 and 2.1 above) of any circumstances affecting your academic performance.

If you would like the School to take these circumstances into account you should make a formal request using the online mitigating circumstances request form: https://imperial.eu.qualtrics.com/jfe/form/SV_bdYYXHq4bmkM2Sp. It allows both extension and other circumstance requests and also encompasses modules outside of the programme (so if you face mitigating circumstances for e.g. an elective you’re taking in a department outside of the School, please fill in the form above and we will then liaise with the relevant department as necessary).

As stated on the opening page of the form, for especially sensitive circumstances, you may alternatively bypass the online form and choose another means; please contact us via desenior.tutor@imperial.ac.uk. The Senior Tutor, Deputy Senior Tutor, Academic Tutor and two members of the Teaching Office team have access to this account.

Tip: We appreciate some of you might want to peruse the form questions in advance, draft them outside the form and copy / paste your answers. To facilitate this, you will find them under Appendix I at the end of this document.

Supporting evidence is expected to be submitted with the request. Depending on the circumstances, you may be given a set period for submitting the evidence. Failing to submit the evidence by the deadline may invalidate your request.

In certain circumstances, such as illness of short duration, you may not be able to obtain evidence. In these circumstances, you may be able to self-certify to provide an explanation as to why evidence cannot be provided. The maximum self-certification period is seven calendar days.

When should you make the request?
This depends on the request:
A. Request for extension to an assessment deadline:
The request should be submitted before the assessment submission deadline. Follow section B below if the deadline is missed.

B. Request for anything else:
The request should be submitted within ten working days of the deadline/exam date. If you are not able to submit the mitigating circumstances form within this timeframe (e.g. the you had an accident and are in hospital without access to a computer), you should contact the Senior Tutor or your Personal Tutor as soon as possible.

Deadline for the receipt of requests (term-time)
The School mitigating circumstances advisory panel (MCAP) meets at intervals during the academic year; see next section below for the full schedule. In reference to mitigating circumstances requests, what is described under B. above and below, requests received on or by the Friday before the cited week (see meeting schedule below) will be considered for that scheduled MCAP meeting. Requests received after that point shall be scheduled for the next MCAP meeting.

Who makes the decision?
A. Request for extension made before an assessment deadline:
Any member of the the School mitigating circumstances advisory panel (MCAP), usually the Senior Tutor, can authorize an extension if the extension is a maximum of two weeks. In exceptional circumstances, requests for extensions beyond two weeks can be considered. The decision to consider such requests and authorising the extension will be made by at least two members of the MCAP.

B. Request for anything else:
The mitigating circumstances advisory panel (MCAP) will consider all other requests. The panel comprises the following:
- Senior Tutor (Chair)
- Deputy Senior Tutor
- Examination Officer
- Academic Tutor

Also in attendance:
• One member of the Teaching Office (minutes)
• School Wellbeing Advisor (see 2.7 above)

The MCAP meets six times a year:
• Week 2 of T1: week beginning 11 October 2021;
• Week 7 of T1: week beginning 15 November 2021;
• Week 2 of T2: week beginning 17 January 2022;
• Week 7 of T2: week beginning 21 February 2022;
• Week 2 of T3: week beginning 09 May 2022;
• Last week of June (i.e. approximately one week before the Exam Board meeting).

Decision

A. Request for extension made before an assessment deadline:
The request will be assessed within three working days from the request date. If the request is rejected, we will provide clear reasoning and advise on other support mechanisms, if appropriate, such as applying for mitigating circumstances.

B. Request for anything else:
If the request is accepted, one of the following will be recommended to the Board of Examiners:

1) Defer. This will allow the Board of Examiners to consider offering the student:
   a) a further opportunity to attempt the assessment(s) at the next available assessment point. If relating to a first attempt at the assessment this will receive an uncapped mark.
   b) to take an uncapped SQT(s) to retrieve outstanding modules
   c) to be permitted to take an SQT(s) to enable progression
   d) to be offered an opportunity to retake the year as a first attempt

   Where the assessment has been passed or the module overall is a pass, the Board may also consider:
   e) extended consideration at the borderline for an uplift in classification in accordance with the College Regulations
   f) consideration at the borderline where a qualifying mark is required for continued progression

2) Allow Late. The late submission assessment(s) is accepted as though ‘on time’ and will receive an uncapped mark.

If the request is rejected, clear reasons will be provided. We shall also cite a 5 working day period to resubmit an amended claim (this may only be undertaken once per request).

Mitigating circumstances and group (course)work?
If a member of your group is affected by Mitigating Circumstances, please first contact the relevant Module Leader and ask for their advice.

If the Module Leader cannot resolve the matter to the group’s satisfaction, the group should submit a mitigating circumstance request (which must be signed by all affected students). This can be assessed by the Senior Tutor and, if applicable, approved by Chair’s action.

The Mitigating Circumstances Request form can be found here: https://imperial.eu.qualtrics.com/jfe/form/SV_bdYYXHq4bmkM2Sp

IMPORTANT NOTE
The College Health Centre can certify illness only for absence from College lasting more than one week, or absence from an Examination. Submit the form as soon as you can.

Support for ongoing or long-term conditions, or for registered disabilities would not normally fall under the remit of mitigating circumstances and students should be supported through their studies with Additional Examination Arrangements. More details can be found on this page of the College website.

5.3 Getting Your Results

Your results will be loaded onto the My Imperial student portal July–August, following the Board of Examiners meeting in July (see 10.5 below). If you are a sponsored student and need your exam results sent to your sponsor, please contact the Student Hub, situated on Level 3 of the Sherfield Building at the Kensington Campus and they can arrange this for you.

When all assessments for the year have been marked and the marks collated, a series of meetings collectively known as the Board of Examiners review the results and allocate an overall grade to each student (see 10.5 below).

Generally candidates who do not satisfy the examiners, either in the examinations or after Supplementary Qualifying Tests (see section below), will be required to withdraw from the College permanently. In exceptional
circumstances, a student may be permitted to retake the year (see section 5.5 below).

5.4 Student Records and Data

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
student.records@imperial.ac.uk

Degree certificates
+44 (0)20 7594 8037
certificates@imperial.ac.uk

5.5 Appeal and Complaints Procedures

We have rigorous regulations in place to ensure assessments are conducted with fairness and consistency, claims for mitigating circumstances have been considered reasonably and in line with the regulations of the College, and that the decisions of the Boards of Examiners maintain the integrity of our academic awards. In the event that you believe that you have grounds to appeal these decisions, we have laid out clear and consistent procedures through which appeals can be investigated and considered:

student.complaints@imperial.ac.uk
Appeal and Complaints Procedures (link)
Regulations for students (link)
Terms & Conditions (link)

IMPORTANT
If you are considering filing an appeal using the College procedures, before doing so we recommend you contact the DUGS and/or the Academic Tutor in a timely manner, and arrange a meeting with them to discuss the issues you are experiencing, in an attempt to solve these internally. If a solution cannot be found, then you can always rely on the College procedures outlined at the link above.

5.6 Supplementary Qualifying Tests (resits)

In the case of a fail in one or two modules, the Board of Examiners may set a Supplementary Qualifying Test (SQT). This course of action is only available where the performance in on other modules is very good. Students are thus not guaranteed an SQT.

SQTs can take the form of an examination or coursework. The decision on the format is made by the module leader and designed to ensure that the module learning outcomes are achieved.

Students can take a maximum of 2 SQTs per year for the first three years of the course. No SQTs are allowed in the final year. SQTs are usually done in the summer (generally late August – early September). The Teaching Office staff will communicate a schedule.

Any modules that have been passed due to an SQT shall be capped to 40%.

IMPORTANT
SQTs must be taken at Imperial College London. The College cannot make arrangements for them to be taken abroad.

More SQT information: Appendix E – Schemes for the Award of Honours

5.7 Retaking a Year

Retaking a year that you have failed is only permitted in exceptional circumstances.

The decision on whether or not you will be allowed to retake will be made at the Board of Examiners, either in July or in the case of a failed SQT or non attendance of one set as summer assessment, in September.

If permission is granted for you to retake a year then you will be expected to start the year again from the start (September/October) and complete it in full. All of your grades from your previous attempts at that year will be discarded, including any modules that you may
have passed. Your grades for any years you successfully passed previously will be unaffected.

5.8 Plagiarism

Plagiarism is the presentation of another person’s thoughts, words, images or diagrams as though they were your own. If any significant level of plagiarism is detected in any submission, the best possible outcome will be a mark of zero.

Students should familiarise themselves with the College plagiarism policy, which can be found here.

The following notes are provided in addition to the College plagiarism policy to detail the position of the School. These principles will govern the assessment of plagiarism for modules.

Departmental Plagiarism Principles

1. Assessed coursework serves a dual purpose of learning and assessment and hence the solutions must represent your own work with all other work clearly identified by citation as necessary.

2. You should work individually or in groups on the solutions, as instructed, expressing your thoughts in your own words. Discussion of general methods and approaches regarding coursework in the spirit of learning, is encouraged.

3. The copying of solutions from others deprives you of the learning experience and hence both the receipt and transmission of assessed coursework is prohibited and will be penalised.

4. Consequently, unless specified otherwise, in accordance with point 5 as below, solutions to assessed coursework must only be shared between you (as per point 2 above) and the module leader/assessors.

5. This prohibition on the distribution of solutions to assessed coursework shall apply indefinitely in time, unless and until the module leader/assessor waives it, but in no case earlier than after the coursework has been assessed for the entire cohort.

Claroifications:

1. Solutions to assessed coursework includes but is not limited to source code, peer/pair programming, specific pseudocode, detailed algorithmic steps, simulation files, simulation results, reports, and supporting explanations.

2. Plagiarism involves sharing such solutions through active transmission to other students, or passive posting of such solutions (in whole or in part) to locations including various public websites and repositories, such as GitHub. This applies to any other means of redistribution for which the access beyond the author, or group of authors, is not actively restricted through privileged access control. Such redistribution will be considered as plagiarism offence, whether it occurs within or outside the student cohort in question (year groups), and it does not cease with students’ graduation.

3. You may share marked coursework solutions with responsible third parties in specific circumstances, e.g. when used in a portfolio to support a job/internship/academic application, with a restriction on further transmission of the content clearly indicated.

4. Re-use of your own work, in the form of simulation files, results, code, text, etc. to support solutions in another module/course is permitted as efficient and good engineering practice. In such circumstances you must cite your original coursework.

5. Within the School, the decision of the plagiarism committee is final. An appeals process exists through the Registry.

6. If you are unclear on the application of this policy, you should check with the Teaching Office (see section 2.4 above).

**IMPORTANT**

College treats plagiarism and cheating offences very seriously indeed.

Online Plagiarism Course

The College online plagiarism Blackboard course is here: [Plagiarism Awareness for Engineering Undergraduates – 21/22](#). For new students, the week one Library session will touch on this, and we expect all new students to complete this course because we appreciate not everyone arrives at Imperial with a good understanding of what plagiarism is. This course will help you to understand plagiarism, and therefore help you to avoid plagiarising through your degree programme.

**TurnItIn**

The School uses the plagiarism detection site TurnItIn both to filter electronic submissions of coursework via Blackboard and to check electronic duplicates of printed submissions.

[Student Guide to Turn It In (link)](#)

5.9 Coursework

The purpose of coursework is to develop your design engineering skills, reinforce lecture material and to develop specific skills in laboratory work, computing, design etc. Most coursework is assessed and contributes towards your degree. Coursework includes project work,
prototypes, presentations, lab reports, project reports, computing exercises and progress tests which are completed and handed in during the year.

**IMPORTANT**
Do not under any circumstances use any copied or pirated coursework, or allow your work to be copied by others. The College treats cheating on coursework exercises exactly the same way as cheating in examinations. If any student is suspected of cheating, of attempting to cheat, or of assisting someone else to cheat, the facts will be reported to the College. If found to have done so, s/he may in consequence be disqualified from all future examinations of the Imperial College.

**SUBMISSION OF WORK REMOTELY**
The late submission policy stated above generally shall stand, but we appreciate that working remotely presents some challenges, of which a good, stable Internet connection may be one. In recognition of this and the potential for it to affect students’ ability to upload and submit work, we shall ask affected students to complete a mitigating circumstances form and consider such requests (see 5.2 above).

**Missed coursework**
If your coursework is more than two weeks late, it will be counted as ‘missed coursework’. Missed coursework will receive 0% and will not be marked for feedback even if it is submitted at a later date.

**Moderation**
Major items of coursework are double marked. The moderation process is intended to ensure fair and accurate marking and to resolve discrepancies in project report marks between the supervisor and the second marker.

**Feedback to Students**
The principal objectives of setting coursework are to assess your progress and to help you improve. The School has a target of 10 working days for coursework to be marked and returned to you. Sometimes circumstances mean that an academic will not be able to achieve this turn-around but they will always notify you if this is the case.

The form of feedback you receive will vary widely, depending on the nature of the submission. A common form is an itemised list of criteria with a tick-box grade for each, along with some written indication of the reason for credit being lost.

**5.10 Examinations**
Most written examinations take place at the start of the term following a module or at the end of the spring and summer terms. They will appear in your timetable.

There is no set ‘failure rate’ for exams and therefore no reason why every candidate should not pass at the first
Past Papers
Normally, each examined module provides at least the last two exam papers, with answers or outline solutions, on Blackboard. These provide a useful guide for paper and question style, but cannot be relied on to guide your revision. Defining what you must be able to do in an exam is the job of the intended learning outcomes given in the module description.

Exam Advice
The Imperial Success Guide provides excellent advice on taking university exams. You should refer to this information regularly.

Exam Stress
Most people find exams at least a bit stressful. We suggest you refer to the College Health Centre’s website for advice on how to manage stress. If you find that you are becoming overwhelmed by stress, there is help available for you. Please also refer to section 2.7 above ‘Wellbeing Advisor’.

Sitting an Exam
Your exams will be in your timetable. It will include all of the information that you require including time, date and locations of exams.

The only items you can take into exams are:
- **Pens, pencils, erasers and rulers.** These must either be loose or in a transparent pouch.
- **Your College identity card.** This must be placed on your desk so that your CID is visible to be noted and your identity checked.
- **Still water** in a clear plastic bottle.
- You will be provided, if necessary, with:
  - A basic scientific calculator — you will not be allowed to take your own, or any peripheral equipment. The Casio FX-83ES provided has all the usual scientific functions. If you need to familiarise yourself with this model, the Teaching Office can issue one on overnight loan if required, otherwise they shall be issued in session.

Other than water, there is to be no eating or drinking during the exam.

College examination conditions and rules e.g. the absolute rule against speaking to neighbours are stated in the Instructions to candidates for examinations and are similar to those for any other public exams.

Academic Integrity and Academic Misconduct
Academic misconduct is the attempt to gain an academic advantage, whether intentionally or unintentionally, in any piece of assessment submitted to the College. This includes plagiarism, self-plagiarism, collusion, exam offences or dishonest practice. Full details of the policy can be found at [http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity-exam-offences/](http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity-exam-offences/).

**IMPORTANT**
No smart watches or (other watches with functions beyond telling the time) will be allowed in the examination room. There will be at least one clock in each examination room.

**REMOTE EXAMINATIONS**
Year 2, 3 and 4 students will have had experience of undertaking assessments remotely. It is highly likely all examinations in the 2021/22 year will be conducted remotely. The School will post guidance on this to all students via Blackboard. Year 1 students will be afforded an unmarked practice opportunity (years 2-4 may sit this optionally). Please read the guidance carefully and ensure you follow the instructions.

**Please note:**
Timed Remote Exams are examinations and not coursework submissions. Therefore late submission, without mitigations, will score zero.

Consideration of Additional Examinations Arrangements in Respect of Disability
Additional assessment and examination arrangements are provided by the College for individual candidates registered as students of the College who have physical, mental or sensory impairments (whether temporary or permanent) or specific learning difficulties. For further details, please read below. You should contact the School’s Disability Liaison Officer; see page 9 of this document.

**Procedures for consideration of exam arrangements in respect of Disability**
Examination Feedback

Please note that your examination scripts once completed are belong to the College under the GDPR legislation. This means that you do not have the right to view them. Please see the College GDPR webpages for further information at www.imperial.ac.uk/admin-services/secretariat/information-governance/data-protection/internal-guidance/guide-2---exam-records/

IMPORTANT
There is no automatic right of appeal against the marks awarded at examination. Students may only appeal against exam results on the grounds of administrative or clerical error and papers will not be remarked.

Each paper is marked by two independent internal examiners, and checked by one external examiner. Students have the right (on payment of a fee) under the Data Protection Act to sight of any such written comments or annotations. Request must be made to the College Secretariat, with payment of a fee, and annotations will then be transcribed to a separate document for access under carefully supervised conditions.

5.11 Grades & Marks for Exams & Coursework

Imperial assesses undergraduate examinations and coursework submissions on a scale of correspondence between percentage mark, letter grade A to E and degree honours class.

All grades and numerical marks issued during the academic year are provisional. They are issued to provide feedback and to provide an indication of progress.

Final marks are awarded only after the Board of Examiners has convened (in July; see 10.5 below). Ultimately these marks, appropriately weighted, will be used to determine which degree class is awarded. These correspondences are shown in the Table below:

<table>
<thead>
<tr>
<th>Grade Letter</th>
<th>... corresponds to mark (%)</th>
<th>... corresponds to degree class</th>
<th>...corresponds to descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>85+</td>
<td>First class honours</td>
<td>Exceptional</td>
</tr>
<tr>
<td>A</td>
<td>70–84</td>
<td>Upper second class honours</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>60–69</td>
<td>Lower second class honours</td>
<td>Very Good</td>
</tr>
<tr>
<td>C</td>
<td>50–59</td>
<td>Third class honours</td>
<td>Good</td>
</tr>
<tr>
<td>D</td>
<td>40–49</td>
<td></td>
<td>Pass</td>
</tr>
</tbody>
</table>

E below 40 Not up to honours level Fail

5.12 Student Prizes and Awards

The programme has several awards to recognise students’ academic achievements or their contribution to the wider College experience. Awards are made at either Departmental or College level. Departmental awards operate at the discretion of the School and are not announced at the graduation ceremony. College awards have been ratified by the College’s Senate and are announced at the graduation ceremony.

The awards described here are mentioned on the awardees’ transcripts. All internal and external awards available to Design Engineering students will be advertised on Blackboard.

The Dean’s List
Because Imperial graduates compete in an international market, Imperial has matched the USA practice of recognising the top 10% of A-graded students on a ‘Dean’s list’ — and marking this achievement on the transcript of graduating students.

The conditions are:
• Achieving an overall mark of 70% or greater during the previous 12 months, and
• Being placed within the top 10% (rounded up) of students in their cohort — e.g., of their year and programme.

The Governor’s Prize
One award is made each year to the 4th year student with the highest mean grade across the cohort in the 4th year.

DESIRE (Design Engineering Selected Innovation REcognition)
The DESIRE award is a prestigious award within the School. It is something that all students should aspire to win during their degree and it will appear on transcripts of the awardees.

Please note that the DESIRE selected works need not necessarily be associated with the top mark or grade scoring project. DESIRE is a departmental award, and its winners will not be explicitly mentioned during the graduation ceremonies.

Which projects get DESIRE awards?
Not all projects qualify for the DESIRE award. It is only for modules where there is a design engineering output in the form of significant coursework. The project could be
a group project or an individual piece of work.

**Selection for the DESIRE award**
The selection of the winner may be done on the day of the assessment or after the completion of the assessment. The selection will be done by a panel of Design Engineering experts with substantial experience in the unique aspects being assessed for the award. The chair of the panel will be the module leader.

If the panel decide that none of the submitted work demonstrates significant outstanding quality, then the award will not be issued. This is to retain the quality of the award winning projects. Winning projects are listed on the School’s award webpage:

[Desire Awards Webpage](#)

**Head of School Prize**
Four prizes are given each year to:
- a) the 1st year student with the highest mean grade across the cohort in the 1st year;
- b) the 2nd year student with the highest mean grade across the cohort in the 2nd year;
- c) the 3rd year student with the highest mean grade across the cohort in the 3rd year;
- d) the 4th year student with the highest mean grade across the cohort across the whole MEng.

**Outstanding Student Achievement Award**
The purpose of this award is to recognise students’ exceptional achievements in extramural activities that have brought credit to College. The Senior Tutor/s in the School place a call out to colleagues within the School to nominate students.

**Old Centralians’ Trust Student Activity Awards**
These annual awards are aimed at encouraging students in the pursuit of extra-curricular activity, such as sporting activities and art, during their time at Imperial. Each award is valued at £750. Up to two awards are normally made in each department of the Faculty of Engineering, though this is not guaranteed. Only year 1-3 students are eligible. Students can expect contact on these awards by the Senior Tutor. The awards are usually confirmed by the Trust by the end of Term 3, but this may take longer. Awardees usually receive their cash prize by the end of term 1 of the following academic year.

**The IED Award**
The award of the Institution of Engineering Designers (IED) is made to an IED student member that produces an outstanding Engineering Design output in their final project.
To be eligible students must be a member of the IED (see section 8.6). Late applications for prize-winners to become an IED student member will not be accepted by the institution.

**The IET Award** (new award introduced 2019)
The award of the Institution of Engineering Technology (IET) is available to our accredited MEng programme and is made to a student that produces an outstanding Engineering Technology output in their final project.
6. School Spaces
6.1 Teaching Spaces

Details of which rooms you need to attend will be clearly listed on your calendar.

Appendix A - Imperial Campus Map

The rooms that we will use most frequently are:

- **Studio 3, Level Three, Dyson Building**
  Flat floor teaching space
  (grid square B3 on campus map in appendix section)

- **2nd Floor Study Space, Level Two, Dyson Building**
  Flat floor teaching space
  (grid square B3 on campus map in appendix section)

- **The Design Library, Level One, Dyson Building**
  Flat floor teaching space
  (grid square B3 on campus map in appendix section)

- **1851 Lecture Theatre, Ground Floor, Dyson Building**
  Lecture Theatre / Flat floor teaching space
  (grid square B3 on campus map in appendix section)

- **The Boardroom, Ground Floor, Dyson Building**
  Occasional Teaching Space
  (grid square B3 on campus map in appendix section)

- **409 Roderick Hill Lecture Theatre**
  Tiered Lecture Theatre
  (grid square A2 on campus map in appendix section, please see note below re: these rooms)

**IMPORTANT**
Lecture and tutorial rooms may not be consistent, week to week; always check your timetable.

6.2 Social Study Space - Level 2, Dyson

The 2nd Floor Study Space in the Dyson Building is available for all students to use as a communal study/social area. This area contains PC/laptop benching, comfortable seating, and a kitchennette. Note that while currently, no teaching is scheduled to take place in this space, teaching events can be scheduled in this space. We will of course notify students where this occurs.

Clean Studio Policy
Please clear up the space after you put anything that you want to keep in your allocated share box. (See: Project Storage). The Level 2 Studio is a communal space used by everyone. As we have storage solutions for all in the form of shared lockable boxes in the Level 2 Studio, we will be implementing a Clean Studio Policy.

**IMPORTANT**
The Level 2 Studio is a communal space used by everyone and operates a Clean Studio Policy. Items left on tables, desks, worktops, and the floor in the Studio on Level 2 will be thrown away every Monday morning.

6.3 Meeting rooms

The School has a number of meeting rooms. You will mostly use these for Personal Tutorials and meetings with academics that they may arrange.
Student use of meeting rooms
The meeting rooms are primarily for staff use. They use a booking system and students cannot book them.

You may use an empty meeting room but must leave as soon as you are requested to. You must always leave meeting rooms in a clear and tidy state, otherwise we will revoke all unaccompanied student access to the meeting rooms.

Dyson Building Meeting Rooms
Trapezoid Rooms 1, 2 & 3
These three rooms are next to each other on the 2nd Floor of the Dyson Building. They are along the side of the Study Space.

How to find the Observatory Building
The Observatory Building is now joined via a link bridge to the main Dyson Building (leading to and from Studio 2 on the second floor). However, you may also enter from the side into the Observatory Building.

1. From Imperial College Road take the side road with the zebra crossing on it (opposite Skempton Building).
2. Follow the road as it turns left and slopes down towards the black fire escape on the exterior of the Observatory Building.
3. Take the stairs to the black door on the second landing (NB: ID card access required)
4. Once through the doors, the office doors are straight ahead of you (this door is DesEng Staff card access enabled only; please ring the bell).

6.4 Storage
Storage space in the School Workshop is limited. Items may only be stored if, and where, agreed in advance by the Workshop Head Technician and if clearly marked with the owner’s name, the supervisor’s name and relevant contact numbers along with dates defining the period of storage.

Given the range of users and the limited storage facilities, appropriate clearing and cleaning during and after any ACE lab activity is absolutely essential. ACE Workshop staff will inspect daily and tidy as necessary: any items left out will be subject to disposal.

Email Head Technician, Ms. Ingrid Logan:
logan@imperial.ac.uk

Download COSHH form (doc)

Chemical Storage
Chemicals cannot be stored in the ACE lab without the prior agreement of the School’s Technicians and the completion and signing off of a COSHH assessment.

Project Storage
In the Studio space of the 2nd Floor, Dyson Building, there are eight storage units, each with 12 storage boxes, providing a total 96 boxes.

Additionally, there are a number of fully securable lockers that are located at the east end of the basement floor (by the lift) and in the Fusion 54 Cafe on the ground floor. This storage is managed by the School’s Student Representatives. If you have any issues with these, you should contact the Reps directly (see: Student Reps). Otherwise you will be responsible for storing the necessary books and equipment for your courses and ensuring that you bring the correct items with you to classes and sessions.

IMPORTANT
Items should not be left out anywhere in the building and will be disposed of, unless they have the express prior permission from the School Operations Manager. When permission is granted, Items must be labelled with the name and contact details of the owner and the date by which the items will be removed. Contact the School Operations Manager, Natalia Goehring with related queries: n.goehring@imperial.ac.uk.

6.5 School Workshop
The School’s workshop facilities are located on the
ground floor of ACE Building (see grid square A2 in the map, Appendix A).

**IMPORTANT**
Failure to keep the lab spaces safe and tidy may lead to restrictions in your access to College lab spaces.

Up to date information on the workshop facilities and procedures, can be found here:

Dyson School Workshop Handbook (Google Doc)

**Workshop Training**
Before you can use any equipment in any of the Workshops you need to be appropriately trained. Induction sessions are scheduled throughout the MEng course. These are pass/fail and an attendance register will be taken.

Before the ACE Lab induction, all students will have to complete an online safety test on Blackboard, of which details will be provided in due course.

Training on specialist machine tools will be provided by the School Head Technician Ms. Ingrid Logan.

**CAD/CAM**
Technical advice on specialist rapid prototyping and CAD–CAM (Computer Aided Design/Manufacture) techniques will be provided by the School Head Technician Ms. Ingrid Logan.

**Workshop Hours**

<table>
<thead>
<tr>
<th>0900–1700</th>
<th>Weekdays*</th>
<th>Supervised</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800–2200</td>
<td>Every day*</td>
<td>Unsupervised</td>
</tr>
</tbody>
</table>

Technical support, supervision and selected power tools will be made available in the ACE Lab Workshop during these hours.

*not including College closure days

**Personal Protective Equipment**
You must wear the following items in the Workshops at all times:
- Sturdy shoes with closed toes
- Safety Glasses
- Boiler suit or lab coat
- Long hair must be tied back at all times
- All jewellery must be taken off

Glasses and labcoats are available to be borrowed from the entrance of ACE Workshop.

**Technicians**

<table>
<thead>
<tr>
<th>Ingrid Logan</th>
<th>Gordon Addy</th>
<th>Saadiqah Rahman</th>
<th>Connor Myant</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:i.logan@imperial.ac.uk">i.logan@imperial.ac.uk</a></td>
<td><a href="mailto:g.addy@imperial.ac.uk">g.addy@imperial.ac.uk</a></td>
<td><a href="mailto:saadiqah.rahman@imperial.ac.uk">saadiqah.rahman@imperial.ac.uk</a></td>
<td><a href="mailto:connor.myant@imperial.ac.uk">connor.myant@imperial.ac.uk</a></td>
</tr>
</tbody>
</table>

Please be courteous and professional to all workshop personnel. Connor Myant is the safety officer for this facility and therefore will be ensuring best practice.

Please see the ACE Workshop Handbook in the Design Engineering Information section of Blackboard.

**Project Work in Research Labs**
College and School health and safety rules dictate that students on taught courses may only work in laboratories during technical staff hours — i.e. between 08:30–17:00, Monday to Friday, while the College is open. Even outside these hours, no-one is permitted to work alone unless the work has been declared (in writing) to be non–hazardous, and authorised by his or her supervisor and the laboratory manager — otherwise, a second person must be present.

**NOTE**
For some laboratories, ‘lone working’ permission is not available.
7. Computers
7.1 Required Laptop

In order to undertake the MEng, you will need to have a laptop computer of your own of modern specification. More details and advice on this is in Appendix G of this document (link).

Regular maintenance
You will be responsible for basic laptop maintenance of your own machine. You must arrange:
- Virus protection
- Ransom ware protection
- Regular security updates
- Backing up your data

College IT security advice (link)
College ICT resources for new students (link)

Imperial College Laptop Surgery
If you have a non-School laptop and have software issues, you can take it to the College’s Laptop Surgery.

College Laptop Surgery (link)

7.2 School Laptop Library

The Department has 36 laptops (PC and Mac) that you may borrow for 4-hours at a time. These laptops are stored in secure lockers located in the Level 2 student space that you operate yourself using your Imperial College ID card. These laptops will be pre-installed with all the relevant software. The loan laptops are not be taken out of the Dyson building.

Borrowing a laptop is like borrowing a library book. If you do not return it within the due period, an overdue fine will be incurred. A full guide to how the loan laptop system works is here:

Appendix G – Laptop Loan System (link)

7.3 College ICT Support

Imperial College Information and Communication Technologies (ICT) provides general assistance with IT issues from a central Service Desk. Handy ICT links:

Resources for New Students
The ICT resources for new students website has been updated with key information including details on how to activate your College account, get connected to College services, access learning tools such as Blackboard and Panopto and how to access software for your course.

7.4 Software

There is an ICT Support YouTube playlist consisting of 17 helpful “how to videos” covering a broad range of topics from “how to use applications on Office 365” to “how to use the printers” when on campus.

New students can learn how to remotely access library journals, their saved files, software and much more by following guidance on our access IT resources remotely web pages.

The College’s Inclusive Technology web pages provide information on software and other applications that students can use to improve their study efficiency. There are useful tools for note taking, revision and time management.

IT security is very important. Awareness of potential scams and an understanding of how to stay safe online can go a long way in protecting students and the College from possible cyber-attacks. Follow our Be Secure web pages for more information. These web pages will be updated by September with new content, visuals and videos.

ICT Access
08.30 to 18.00, Monday to Friday:
In–person – ICT Service Desk, 1st Floor, Central Library, South Kensington Campus
Phone – 0207 594 9000  (internal extension 49000)
24/7 Support: ASK ICT (link)

All staff and students are bound by the conditions of use for IT facilities (link).

Important
Back–up your digital work regularly!
Hacking and hardware failure can lead to losing your work. It is your responsibility to protect against this.

7.4 Software

The School will provide access to any software that you may need for the course. Imperial College has agreements with many companies such that students could install some software free on their own personal machine.
Please check out this web-page to see what software is available for you while being a student at Imperial:

**Software shop:**
www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/devices-and-software/

Some packages are only available on the School’s loan laptops. To use these, you must borrow one of the loan machines and use it within the School’s building.

**Adobe Creative Cloud CC**
Adobe Creative Cloud CC (the full suite of creative software) will be installed on all the loan laptops.

Additionally each DE Year Group will have access to Adobe CC on their personal laptops for one term each year.

Adobe Creative Cloud CC Licenses for 2020-21:
Please see the aforementioned appendix G at the end of the handbook for details on measures the School has taken to equip students with licences for this academic year to mitigate remote working due to coronavirus.

### 7.5 Printing

It is possible to print to the communal college printers from your School issued private laptop. You will need your College ID card to do this.

**How to print** ([link](#))

Printing to communal College printers and using the photocopiers costs money. You can purchase printer credits to charge your card at the Central Library or online.

Communal printers and photocopiers can be found on Level 2, Dyson building and the Central Library.

**Printer credits**
Undergraduate students who join the School in or after October 2018 will be issued with £10/year printing credit for use on College printers.

This will be automatically issued to your account at the start of each year.

**Service Point**
Some projects may require that you design a poster to present your work. Posters can be printed at Service Point, the College’s on-site contractor for bulk and professional printing.

**IMPORTANT**
Ensure you allow sufficient time for the turnaround of printing tasks.

**Service Point** ([link](#))

### 7.6 Internet Access

Imperial College London provides and supports excellent access to the Internet, both on-site and in halls. However, this access is not unrestricted and its misuse, or its use for anti-social behaviour, are regarded as serious offences.

An account for access to IT facilities will have been created for you on registration, and you shall be provided with a username and password for access to Imperial College systems. If you forget your password and need to obtain a new one, you will need to produce a valid College ID card.

**How to access the Wi-Fi and networks** ([link](#))

**IMPORTANT**
In your contract as a student you have agreed to abide by the Conditions of Use of IT Services. These conditions concern anti-social behaviour by which other users can be affected and areas of misuse which come under UK Law.

The College network extends to student halls and here, again, it is important to be aware of the restrictions imposed both by College regulations and by national law.

### 7.7 Imperial Apps

**Imperial Mobile app**
Many College services are available through the Imperial College Mobile app. This is available on iOS and Android and there is a web version for other devices.

We recommend that you download this app.

**Download Imperial Mobile** ([link](#))

**Welcome to Imperial app**
The College has a *Welcome to Imperial app* which contains important information about campus operations, aspects of student life, a schedule of welcome activities and information about life in halls. All new students should download this guide to ensure they have the most up to date information and event schedule for the start of term. You can download the app from the Apple or Google App Stores.
7.8 General Data Protection Regulation (GDPR)

All staff and students who work with personal data are responsible for complying with GDPR. The College will provide support and guidance but you do have a personal responsibility to comply.

In line with the above please see the College’s privacy notice for students which form part of the terms and conditions of registration with the College.

Privacy Notice for students (link)
8. Professional Development
8.1 What is a Chartered Engineer?

The title Chartered Engineer (CEng) is protected by UK civil law and is internationally one of the most widely recognised of engineering qualifications. In the UK, it is awarded by the Engineering Council.

The benchmark for CEng is UK-SPEC: the UK Standard for Professional Engineering Competence. UK-SPEC, published by the Engineering Council, tries to specify the essential attributes of a professional engineer. It was developed, and is regularly updated, by panels representing UK professional engineering institutions, employers and educators.

To become a Chartered Engineer, you will need:
- The Educational Base: an MEng or equivalent degree from a recognised degree programme like ours; and
- An extended period of Initial Professional Development (IPD): work-based training and/or experience under the guidance of a Mentor.

A professional institution like the Institution of Mechanical Engineers (IMechE), the Institution of Engineering Designers (IED) or the Institution of Engineering and Technology (IET), acts as an agent for the Engineering Council: it both accredits degree programmes and, through a network of suitably qualified mentors, monitors the subsequent IPD process.

Most UROP placements are paid, but not all supervisors have sufficient research funding available. Some research sponsors, even relatively generous ones, put tight restrictions on the way in which funds can be spent. Under these conditions supervisors may be able to offer exciting projects bringing close interaction with potential employers, but unable to support bursaries for them.

8.2 UROP Placements

The Undergraduate Research Opportunities Programme (UROP) matches students with ‘research internships’, either within or outside Imperial. A UROP placement offers work experience within a research environment; the work is usually paid and some bursaries are available.

The UROP scheme at Imperial is coordinated within Registry, and is described in detail on the College web page. However, perhaps the best way to initiate a placement within Imperial will be to contact a research-active staff member whose work interests you. If you do agree a placement by this informal route it should still be set up formally, otherwise you will be unable to earn ECTS credits.

Important
The best way to initiate a placement within Imperial is to contact a research-active staff member whose work interests you.

8.3 Careers Service Sessions

Throughout all four years of your course you will have the opportunity to engage with careers sessions to prepare you for future employment and opportunities.

These careers sessions will be scheduled into your timetable and it will be clear whether they are optional (drop-in or pre-book) or compulsory.

School’s Careers Officer
The School’s Careers officer is María Apud Bell. If you have any queries or suggestions about careers events, contact on maria.apud-bell@imperial.ac.uk.

College Career Services
There is a central College Careers Centre based on the 5th Floor of the Sherfield Building. Full details of their services can be found on their webpage.

8.4 Intellectual Property

What is IP?

Intellectual Property (IP) is a term used to describe an individual’s creative output such as an invention. Intellectual Property Rights (IPRs) such as trademarks, patents, copyright and design rights are the legal means that can be used to prevent others from using your creative output without your consent. You need to consider protecting any IP you develop whilst you are at The School, whether you have developed it as part of the School’s syllabus or through extra-curricular activities.

IP will be covered during the MEng curriculum however you should start learning the basics now. The College has some excellent resources to teach you about IP on the Imperial College website. The College have also created two YouTube videos which also recommended viewing.
8.5 Industry Advisory Arrangements

The School has a strategy for industrial engagement to ensure that the vision of the school, the directions of research and the development of the curriculum are pushing the boundaries of theory and practice in design and engineering. To address this, our engagement with industrial partners spans three levels:

• **Strategic Advisory Board (SAB)** –
  This is an elite group of up to 10 companies at a time, carefully selected to give a strategic overview of global future trends that will impact design engineering. We have selected world-leading companies from a range of different industrial sectors and contexts, across physical and digital domains. We work closely with these companies to help us gain foresight of how global and local economies will change, and what big shifts are on the horizon.

• **Industry Advisory Board (IAB)** –
  This is a broader group of up to 30 members at a time. These are invited to represent a wider cross section of industry (from small start-ups to large international corporations across different disciplines) and the third sector (policy and charities) to give us insight into a wider range of opportunities.

• **Industrial Partnerships Group (IPG)** –
  This final level consists of any organisations linked to the school, including those who offer industrial placements, work on research projects, or run projects with our students. They receive newsletters about the work in the school and we track partnerships across different activities to ensure linked working across the school. We host a range of engagement activities with these different groups across the year, and invite students to participate in discussions, networking and showcasing their work.

8.6 Joining Professional Institutions

The MEng in Design Engineering is accredited (CEng) by the IED ([The Institution of Engineering Designers](https://www.ied.org.uk)), the IET ([The Institution of Engineering and Technology](https://www.iet.org)) and the IMechE ([The Institution of Mechanical Engineers](https://www.imeche.org)). This is a tremendous achievement and endorsement of the programme.

We strongly encourage you to make use of student memberships to these three institutions. These have either very low (IET) or no membership fees (IMechE and IED) until you graduate. Professional institution memberships will allow you to receive support and guidance at each stage of your career, providing you with a professional home for life. Please refer to the links in order to get more information about the joining process.
9. Surveys & Feedback
We welcome feedback on teaching from students. We want to improve and make your learning experiences in the department as enjoyable and fulfilling as possible.

Students have academic tutors and personal tutors who can help resolve problems and pass on suggestions for improvement in teaching. All students are encouraged to raise issues and to make suggestions to the School.

There are a number of avenues of feedback available to our students.

9.1 Giving feedback to staff

Please feel free to give courteous feedback and raise questions in-person to all staff. If you have an issue and don't speak up, then the School will not be able to address the matter in a timely manner.

Module Leaders
You can contact the relevant Module Leader or Associate Module Leader/s with general points about a module at anytime. This includes comments on the general content of courses as well as specific issues.

Personal Tutor
You can contact your Personal Tutor about your individual study either in your timetabled Personal Tutorials or, if needed, via email or a special one-off meeting. You can also talk to your Personal Tutor if you have an issue that you have raised with a Module Leader but you do not feel has been appropriately addressed.

Senior Tutors
The Senior Tutors usually deal with group feedback (the SSCC (see 9.2 below) as below or survey results) but if you have raised an issue with your Personal Tutor and you do not feel it has been appropriately addressed, you may contact the Senior Tutor.

Faculty Senior Tutor
The Faculty Senior Tutor has responsibility for ensuring the delivery of consistent, high quality support for students in their personal, general academic and professional development. If you have a matter which you feel is highly sensitive or complicated you may wish to contact the Faculty Senior Tutor, see section 2.6 above for more details.

9.2 Staff-Student Consultative Committee (SSCC)

Staff-Student Committees (SSCCs) 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. SSCCs are a formal way for student representatives to raise issues that are of a concern to the wider student body. Minutes of the meetings are taken and available for all students via Blackboard. Meetings are held termly.

Members of the SSCC include all the Student Reps (all Year Reps + School Reps), and representatives from the School’s staff: Head of School, Director of Undergraduate Studies, The Senior Tutor and/or The Deputy Senior Tutor, The Academic Tutor, Strategic Teaching Fellow and one member of the Teaching Office as the secretariat.

Students are strongly encouraged to raise questions or concerns at the Staff and Student Committee though their student representatives.

To find your student representative please see 12.2 Student Representatives.

College good practice guidelines for staff-student committees are available here: [www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback](www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback)

9.3 UG SOLE Lecturer / Module Survey

This is a College-level survey. This survey, which runs at the end of the autumn and spring terms, is your chance to tell us your opinion of the modules you have attended and the lecturers who taught them. Alongside exam and coursework results, SOLE (and especially the free text comment boxes) provide our main source of information for managing course development.

**IMPORTANT**
When entering free text, please be absolutely specific (with names!) about who or what you are commenting on.

The dates for SOLE are:
- **Autumn Term**: early December – early January
- **Spring Term**: mid March – Easter
- **Summer Term**: early June – early July

You will be notified via your College email of the exact survey dates.

[Access survey and past results (link)](access-survey-and-past-results)
9.4 Student Experience Survey

This is a college-level survey. Run at the same time as the autumn term UG SOLE lecturer/module survey is the Union’s Student Experience Survey (SES). This survey will cover your induction, welfare, pastoral and support services experience.

- Motivations for taking the programme,
- Depth of learning
- Organisation
- Dissertation and
- Professional development.

During spring term you will receive an email providing a link to the survey.

**IMPORTANT**

Imperial surveys are completely anonymous. The more students that take part the more representative and useful the results. This feedback is highly valuable so please do take a few minutes to give your views. Thanks!

9.5 National Student Survey – NSS

This is a national-level survey. While in the Fourth year of your programme, you will be invited to take part in the National Students Survey (NSS). NSS asks all final-year undergraduates to rate a range of elements related to their student experience such as:

- Academic support
- Learning resources and
- Assessment and feedback.

This nationwide survey compiles year-on-year comparative data for higher education institutions, with its results being made publicly available.

Unistats website (to see Imperial’s National Student Survey results)

Read examples of student survey response at Union website
10. DE Year by Year
10.1 Key Dates and Attendance

The College has both a duty of care towards its students, and regulations to ensure that they follow the prescribed programme of studies.

Regular attendance in lectures, tutorials and lab sessions improves the learning experience. Attendance in personal tutorials improves pastoral support. Your attendance at personal tutorials will be taken and logged on a system called Starfish.

Key dates 2021–22

Term dates
Term Dates (link)

Closure dates
College Closure Dates (link)

Key Events

Great Exhibition Road Festival: 09 - 15 October 2021.

IMPORTANT
For all coursework submission deadlines, key dates and late-breaking news associated with specific modules, please check the calendar on the corresponding BlackBoard page.

You are required to attend College until the end of session because the External Examiners may wish to interview you during the last week. You should therefore avoid any commitment, other than those forming part of the course, that could prevent you attending College during term-time.

Term Structure
Design Engineering has teaching across all three terms. We also have exams throughout the year, rather than in one session at the end of the year.

Terms 1 & 2

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome Week (T1) Exams (T2)</td>
</tr>
<tr>
<td>2–5</td>
<td>Teaching</td>
</tr>
<tr>
<td>6</td>
<td>DRAW Week</td>
</tr>
<tr>
<td>7–10</td>
<td>Teaching</td>
</tr>
<tr>
<td>11</td>
<td>Teaching, in-class progress tests and other supplementary activities</td>
</tr>
</tbody>
</table>

Term 3

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exams &amp; Teaching</td>
</tr>
<tr>
<td>2–7</td>
<td>Teaching</td>
</tr>
<tr>
<td>8</td>
<td>Teaching / Assessments</td>
</tr>
<tr>
<td>9</td>
<td>Exams / Assessments</td>
</tr>
</tbody>
</table>

IMPORTANT
There will be scheduled mandatory activities throughout the first and last weeks of every term. You are expected to be available to attend throughout.

What is DRAW Week?
DRAW stands for Design, Review, Applications and Workshops.

During DRAW Weeks there will be a variety of one-off activities timetabled. Some of these will be directly related to your current studies and some of them will be looking beyond the curriculum.

DRAW Week is a busy week and all of the sessions are mandatory.

IMPORTANT
DRAW Weeks are not traditional ‘reading weeks’ – you will not have the chance for trips away from College during this time.

I-Explore Modules
Through I-Explore, you’ll have the chance to deepen your knowledge in a brand new subject area, chosen from a range of for-credit modules built into your undergraduate degrees will include one module from I-Explore’s wide selection. For students that started the Design Engineering MEng in 2018–19, one I-Explore module can be taken in the third year of study.

Link to I-Explore Modules
10.2 Degree overview

A schematic overview of the academic curriculum is given in Appendix B - Programme Modules Gantt Chart.

Every teaching and learning activity is part of a module, which is taught in a specific year of the course (DE1 to DE4). These are grouped in board themes, listed below.

- Design Engineering Projects
- Electromechanical Engineering
- Engineering Analysis
- Enterprise and Professional Practice
- Physical Engineering

Each module is self-contained and separately assessed although, of course, its subject matter will be linked to that of other modules.

Note

As the MEng Design Engineering is a relatively new course, information regarding subsequent years is subject to change. In addition the programme includes a diverse range of electives, some run by other departments, some run by the Dyson School of Design Engineering and open to students from other departments. These modules offer a crucial opportunity for interdisciplinary experience and activities.

A key activity in the programme is the extensive project work, some in combination with students from other departments, which is undertaken in each of the years, enabling implementation of material covered in the modules as well as project based learning of key technologies.

The programme has a diversity of means of assessment with a particular emphasis on project work, assignments and coursework as opposed to examinations. The project work focus enables students with particular requirements to schedule their efforts according to their particular needs. Several electives are available in years three and four, permitting students to adjust the focus of their studies as they progress, and the intention is to make further elective modules available as the School develops.

10.3 Modules Year by Year

In response to an ever-changing landscape for engineering, science and medical education, Imperial College London has been undertaking a major curriculum review covering all aspects of our undergraduate programmes. Employing an all-round participatory design approach, involving all the relevant stakeholders (e.g. students, staff, industry, etc.), we have thoroughly reviewed the Design Engineering MEng course over the past three years. We are proud to launch the new programme for cohorts joining us since 2019-20.

For the students that had already completed parts of the degree (i.e. the student cohorts having joined us in 2016-17, 2017-18 and 2018-19), we incorporated parts of the revised curriculum into the ‘old’ programme. For this reason, in 2021-22 we have two variations of the Design Engineering MEng curricula:

1 - For students that commenced in 2017-18 and 2018–19. The first two years of the curriculum are from the ‘old’ programme, while the third and fourth years are from the new reviewed programme. This programme will be referred to as the Blended Programme.

2 - For students commencing from 2019–20. all four years of the programme will follow the new curriculum. This programme will be referred to as the New Programme.

In the next sections is information pertaining to the modules within each of these curricula.
New programme  

The First Year

The programme commences with key foundational skills and knowledge building in design and engineering fundamentals. Beginning with induction projects, the novice design engineer’s experience of the design process is steadily developed through a series of design engineering projects, enabling the student to see the practical application of content introduced in other modules as well as developing their own individual experience base and design process, communication and project management skills. Second and Third Years

In the second and third years, the range of engineering fundamentals, design thinking, creative problem solving, management and communication skills are developed, leading to a series of enterprise modules and projects where students develop skills in value propositions and turning their concepts into embodied concepts and proposals that are suited to corporate and enterprise roll-out. Students going onto the fourth year will then take part in a six-month industrial placement intended to give them real commercial experience and an opportunity to put the skills they have acquired into practice.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Title</th>
<th>Description</th>
<th>Core / Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Analysis</td>
<td>Computing 1: Introduction to Scientific Computing</td>
<td>This module aims to introduce students to computer programming and analysis through a hands-on approach. They will learn the Python programming language using the Jupyter Notebook environment. The module will focus on the fundamental algorithms and data structures that are the foundations of computer programming in any language. Students will use Python coding to solve maths problems, a key foundation skill needed in design engineering. By the end of the module, students should be able to write moderately complex programs based on the Python language and be able to transition easily to other high-level languages, such as Java, C#, .NET, C++, etc. The idea of this introductory course is to lay a foundation such that the students can undertake independent learning for application-specific programming in their subsequent analytical work.</td>
<td>Core</td>
</tr>
<tr>
<td>Engineering Analysis</td>
<td>Computing 2: Applications</td>
<td>The aim of this module is to provide students with the design concepts, theoretical foundations, and hands-on experience to efficiently construct their own algorithms and data structures for solving general or particular problems. To this end, the module covers the basic techniques for analysing the running time of algorithms, paradigms of algorithm design, and well-known data structures and high-level algorithms that a design engineer should be comfortable with and able to apply to further modules in the programme.</td>
<td>Core</td>
</tr>
<tr>
<td>Electromechanical</td>
<td>Electronics 1: Introduction to Electronic Circuits, Sensors, and Mechatronics</td>
<td>This module introduces students to both analogue and digital electronics as found in all electronics systems. The module approaches the subject both theoretically and practically, including topics such as analysis of circuits, CPU architectures and interfacing to micro-controllers. By the end of the module, students will be able to design and implement both circuits and python based embedded programs in electronics hardware that contains four main elements: 1) sensors that produce electrical signals from physical world; 2) driver and actuators that provide mechanical movements; 3) communication links that passes messages between a mobile device and the embedded electronic systems; 4) embedded programming that gives the electronic system intelligence and adaptability.</td>
<td>Core</td>
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<tr>
<td>Engineering Analysis</td>
<td>Engineering Mathematics</td>
<td>This module aims to provide students with sufficient mathematical tools and techniques to tackle a variety of design engineering problems. There is particular focus on the intuitive understanding of topics, rather than investing too much time grinding through the calculations. It is taught using the “inverted classroom” approach, where students are expected to have already watched specific lecture videos online before engaging with an interactive learning experience in class. This modern approach has proved to be extremely effective for other courses at Imperial and seems to make learning maths considerably more enjoyable.</td>
<td>Core</td>
</tr>
<tr>
<td>Design Engineering Projects</td>
<td>Human centred Design Engineering</td>
<td>This module aims to develop students’ competence and self-confidence in the key elements of creative human centred design engineering tools and process. Students will also learn and develop design engineering communication techniques; including design drawing, engineering drawing, 3D computer aided design, 2D digital graphics and oral presentation. These two elements combine in a substantial structured design engineering project which involves both individual and team based activity. Student confidence and ability to work autonomously is developed through the requirement to investigate and define a human centred design engineering opportunity/problem area, establish meaningful links with users and stakeholders for information gathering and validation and manage the overall project process to deliver a complete set of outcomes in submissions, presentation and an exhibition of work.</td>
<td>Core</td>
</tr>
<tr>
<td>Enterprise and Professional Practice</td>
<td>Introduction to Design Engineering</td>
<td>This module provides an introduction to design engineering in three significant areas: 1) the evolving global and professional contexts for design engineering, 2) the foundational mindsets, methodologies and methods for creatively tackling design engineering issues and 3) the focused opportunity to apply and develop core practical and intellectual skills. Contextual understanding will be enhanced by a number of guest lectures from industry-leading practitioners of design engineering. Skills are developed through practical tutorial activities and through application in a series of short design engineering projects. Students start to develop their own critical analysis of contemporary contexts through a self initiated study on ethical, environmental and social elements in a design engineering topic of choice.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>Materials &amp; Manufacturing (F.K.A Production &amp; Materials)</td>
<td>Production and materials provided students with an understanding of material properties and the means to manufacture them into geometries. Underpinning material science in metals, polymers, ceramics and composites combined knowledge of how to apply them into different use cases will equip students to quantitatively assess material selection problems and also enable them to abstract the knowledge onto more complex problems.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>Solid Mechanics 1</td>
<td>In Mechanics, students learn how to link force and displacement using laws of physics. They use this knowledge to model several real-world problems, including predicting failure loads in stationary structures and predicting the motion of objects. They put their knowledge in practice in an outdoor unique activity, the catapult challenge.</td>
<td>Core</td>
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</table>
Second and Third Years

In the second and third years, the range of engineering fundamentals, design thinking, creative problem solving, management and communication skills are developed, leading to a series of enterprise modules and projects where students develop skills in value propositions and turning their concepts into embodied concepts and proposals that are suited to corporate and enterprise roll-out. Students going onto the fourth year will then take part in a six-month industrial placement intended to give them real commercial experience and an opportunity to put the skills they have acquire into practice.

Second Year

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<tbody>
<tr>
<td>Engineering Analysis</td>
<td>Data Science (formerly known as ‘Big Data’)</td>
<td>The module aims to provide students with sufficient tools and techniques to explore small and large datasets, to perform data analysis and to use key insights from statistics and machine learning. The main topics include the basics of data analysis, statistics, and advanced data science. During the whole module, tutorials will be structured around case studies that are appropriate for Design Engineering students, such as social media activity analysis.</td>
<td>Core</td>
</tr>
<tr>
<td>Electromechanical Engineering</td>
<td>Electronics 2: Signals, Systems, and Control</td>
<td>This course is a follow on from Year 1’s Electronics 1 module by providing a system perspective to electronic systems. The focus of this year module will be on signal interpretation, processing and manipulation; system characterisation and modelling; feedback control and tuning of feedback systems. By the end of this module, together with what have been covered in the first year, students will have most of the fundamental concepts of electrical and electronic engineering necessary for a design engineer. Some may even have the prerequisites to study more advanced modules in EEE in their 3rd and 4th years.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>Finite Element Analysis (formerly known as ‘Computer Aided Engineering’)</td>
<td>In FEA, in a hands–on environment, students learn how to use one of the most versatile computational modelling techniques, the FEA, to model complicated mechanical systems, predict their performance and even optimise the design by making informed alterations. The modules includes an experimental lab, where students put their predictions into a test and reflect on their models based on experimental observations. The topics that we cover range from failure of static structures to fatigue, buckling and vibrations.</td>
<td>Core</td>
</tr>
<tr>
<td>Electromechanical Engineering</td>
<td>Gizmo: Physical Computing</td>
<td>Gizmo combines the approaches of Physical Computing and Mechatronics. It is a foundational course that assumes you have elementary or no prior knowledge in one or more of the associated subjects of mechanical design, electronic control and feedback systems, and computing. The module takes an active learning approach, with most of the real work happening in the workshops and programming and interacting with your peers and tutors. A broad overview of tools and techniques used in Physical Computing and Mechatronics will be provided, with emphasis on mechanisms.</td>
<td>Core</td>
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<tr>
<td>Design Engineering Projects</td>
<td>Industrial Design Engineering (formerly known as 'Engineering Design Project')</td>
<td>The Industrial Design Engineering module is built around a single substantial project brief which aims to integrate a human centred design approach with creative design engineering of a complex electromechanical product. Benchmark products will have multiple components; materials, manufacturing and market factors to consider. This project based context provided requires further development in human centred design engineering, engineering analysis, machine elements, mechatronics, form, design for manufacture, assembly and production, product marketing considerations and project management. Project outcomes include well resolved working prototypes which are demonstrated in a final presentation and used for verification and validation against defined user requirements.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>Solid Mechanics 2 (formerly known as 'Mechanics for Design Engineers (M4DE)')</td>
<td>This module is a progression from Solid Mechanics 1, and develops key foundational principles for later modules, such as Robotics and FEA. The module focuses on Kinematics, and Dynamics of rigid bodies, Vibrations and Stress Analysis is also included.</td>
<td>Core</td>
</tr>
<tr>
<td>Design Engineering Projects</td>
<td>Sustainable Design Engineering (formerly known as 'Design 2')</td>
<td>More than ever, designing for sustainability is fundamental to design engineering practice. This module reinforces the foundations of knowledge and skills with methodologies and methods developed in year 1, and through analysis of a key challenge for sustainability, introduces specific principles and methods for sustainable design. Validated design engineering concepts for improving the environmental impact of the analysed situation are developed and presented.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>Thermofluids: Energy &amp; Design</td>
<td>Nearly every product, service and system consumes energy in its production, implementation and end of life. Design Engineers can consider these factors at the design stage, taking deliberate decisions on the magnitude and impact of the energy concerned. These decisions can have substantial energy efficiency impact. This module introduces the topic of energy within a design context and the associated engineering sciences of fluid mechanics, heat transfer and thermodynamics. The topics covered range from physical models to real-world practical applications and design principles.</td>
<td>Core</td>
</tr>
<tr>
<td>Enterprise and Professional Practice</td>
<td>Working in Organisations</td>
<td>This module aims to develop an understanding of the different organisational contexts Design Engineers operate in and help students consider the current and future professional landscape, together with preparing effectively to position themselves on a career route that is most relevant and exciting to them. The module requires students to research and analyse organisations, make meaningful external connections, start and grow a professional network, prepare a professional CV with a strong portfolio of their existing work and write an essay that reflects on their investigation of organisations and career trajectory considerations.</td>
<td>Core</td>
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# Third Year

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<tbody>
<tr>
<td>Design Engineering Projects</td>
<td>Design Engineering Futures (formerly known as 'Group Project')</td>
<td>Students form teams to develop analysis and then original designs in response to significant design engineering futures challenges or opportunities taking account of a wide range of social, environmental, technological and economic factors. The project based work builds on earlier design engineering skills, understanding and team working, but adds the introduction to techniques for future analysis and innovation together with the requirement for high levels of prototype embodiment and validation through engagement with external stakeholders. As project deliverables, teams produce prototypes, project reports and exhibitions of their work.</td>
<td>Core</td>
</tr>
<tr>
<td>Enterprise and Professional Practice</td>
<td>Industry Placement (Part 1)</td>
<td>The Industry Placement modules aim to provide practical industry experience on a substantial design engineering related project, or collection of related projects. Lasting up to 6 months Industry Placement (Part 1) will run from April until June in the third year of study, directly followed by Industry Placement (Part 2) from July until September and the beginning of the fourth year of study. Utilising work carried out to develop CVs and Portfolios in the 2nd year Working in Organisations module students secure a placement with an organisation prior to the start of the placement period. They then work with the organisation for the duration of the placement.</td>
<td>Core</td>
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</tbody>
</table>
| Enterprise and Professional Practice | Innovation and Entrepreneurship | To provide design engineers with an understanding of:  
- Ability to assess market potential to take an informed decision to develop a venture  
- How to turn venture ideas into commercial products considering market needs (service thinking and marketing)  
c) The structures, cultures, practices and financial underpinnings of enterprises  
d) Management best practices and principles of good teamwork in agile design engineering environments | Core            |
| Engineering Analysis       | Optimisation                               | The Optimisation course is designed to provide students with exposure to a rational integration of design methodologies with the concepts and techniques of modern optimisation theory and practice. Through the course, the students will learn to rationalise and quantify an engineering system or product design problem, develop proper mathematical models to formulate a design optimisation problem, and apply appropriate optimisation algorithms to solve it. | Core            |
| Electro-mechanical Engineering | Robotics 1: Introduction to Robotics       | This module, taught in two parts across autumn and spring terms, provides an introduction to the field of robotics without requiring prior knowledge or experience in this topic. The students will be acquainted with the most important theoretic building blocks in robotics, namely, kinematics and dynamics of robots, robot control and motion planning algorithms. The module emphasises both theoretical and practical aspects of robotics. It includes many tutorial and lab sessions that enable hands-on experience and provide the students with access to state-of-the-art robots. | Core            |
|                            | Robotics 2: Applied Robotics               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Core            |
| Electives: Two Year 3 electives as shown in next section (Fourth Year) | |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                 |
## Fourth Year

The fourth year offers several electives, allowing a greater degree of specialisation to students than earlier years. The fourth year also contains a high proportion of the programme’s commercially oriented modules; this was designed to consolidate the students’ industrial placement experiences with their previous academic studies and invest students with the skills in enterprise and design in commercial contexts that the programme aims to provide its graduates.

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<tr>
<td>Enterprise and Professional Practice</td>
<td>Enterprise Roll Out</td>
<td>ERO aims to provide students with the knowledge and understanding they will need to create viable enterprises and deliver new products to market taking account of ambiguity and uncertainty; plan and implement appropriate prototyping strategies; effectively communicate and test ideas with target markets and stakeholders; explore and quantify commercial potential and develop a commercialisation strategy; evaluate risks and plan mitigation; develop and pitch a compelling value proposition to investors/funders; work in an effective and professional team planning and managing both strategy and team tasks; adopt best practice in their documentation and communication of progress and findings; embody their ideas and innovations sufficiently to exploit identified potential</td>
<td>Core</td>
</tr>
<tr>
<td>Enterprise and Professional Practice</td>
<td>Industry Placement (Part 2)</td>
<td>The Industry Placement modules aim to provide practical industry experience on a substantial design engineering related project, or collection of related projects. Lasting up to 6 months. Industry Placement (Part 1) will run from April until June in the third year of study, directly followed by Industry Placement (Part 2) from July until September and the beginning of the fourth year of study. During Part 2 students are expected to be able to demonstrate completing their contributions to a significant project or collection of projects and to provide a reflective presentation to their host organisation and report on their professional development.</td>
<td>Core</td>
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<tr>
<td>Design Engineering Projects</td>
<td>Master’s Project (formerly known as ‘Solo Project’)</td>
<td>The Master’s Project represents the culmination of the four year design engineering journey. Students have a high degree of choice of project topic based on outline briefs defined by an academic, an industry partner or the student themselves. This allows for specialism building on evolving interests, placement work and pattern of elective choices. Likewise the project deliverables and assessments allow for a very wide range of project types from theoretical research to projects with significant iterative physical prototyping. This reflects the wide potential of design engineering spanning; enterprise, design, physical and digital engineering subjects.</td>
<td>Core</td>
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<tr>
<td>Elective (Group A)</td>
<td>Advanced Industrial Design</td>
<td>The AID elective module provides the opportunity to further develop industrial design skills and knowledge to a high professional level alongside gaining understanding of significant emerging themes and methodologies within the field. At this level industrial design takes a product service systems perspective and incorporates development of CAD skills needed for advanced approaches such as generative design, but also in virtual prototyping and visualisation. Students work on individual projects culminating in high quality visualisation of concepts which will be important content of professional portfolios and may be entered into international design competitions such as the RSA student design awards.</td>
<td>Elective, Years 3 &amp; 4</td>
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<tr>
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<tr>
<td>Elective (Group A)</td>
<td>Audio Experience Design</td>
<td>An introduction to audio technology and perception, which includes acoustics, psychoacoustics, digital signal processing, audio recording techniques, audio reproduction techniques, 3D sound synthesis and reproduction and other selected topics such as data sonification and loudspeakers design.</td>
<td>Elective, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective (Group A)</td>
<td>Design for Additive Manufacture (D4AM)</td>
<td>It is vital that the next generation of engineers and designers are equipped with the knowledge and skills necessary to harness the full potential of Industry 4.0. Part of this new industrial revolution is Additive Manufacturing; an exciting and fast developing area of digital manufacturing. This module provides engineering students with the platform needed to solve future industry challenges, get the most out of 3D printing technology and optimise designs. The module is aimed at engineering students who have an interest in 3D printing and advanced manufacturing methodology; who have the desire to become industry experts or academic researchers in this exciting area.</td>
<td>Elective, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective (Group A)</td>
<td>Design Psychology</td>
<td>Design Engineering encompasses a particular emphasis on human factors, the study of the way humans behave physically and psychologically in relation to certain environments, products, or services. Understanding human factors thus requires knowledge in psychology. Global challenges invariably require taking into account behavioural change in order to affect lasting solutions. Such challenges may be concerned with for example understanding patients’ behaviour and decision-making when non-adhering to medication, understanding human emotional processing within human–robot interactions or designing behavioural interventions to help foster sustainable behaviours. A deeper understanding of people’s behaviour is thus necessary to produce more effective human-centred products, experiences, systems, services, decision-making procedures and design processes. This module will provide an overview of basic psychological processes that govern human behaviour, emotions, attitudes, decision-making processes, as well as including aspects of user interface design and social science methodology. It will give budding Design Engineers a human-centric edge when working on their projects by providing a much-needed behavioural dimension to their design thinking.</td>
<td>Elective, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective (Group A)</td>
<td>Designing Interventions for Behavioural Change</td>
<td>This module will develop competence in scoping, analysing and developing creative interventions for behaviour change. Possible interventions include wearables to improve health, products for more sustainable consumption and policy to improve tech-enabled business models. Students will be exposed to several creative behavioural frameworks that can be applied to the development of (digital and physical) product, services, events, policy and organisational interventions. Designing Interventions for Behavioural Change offers a deep dive into the use of practical theories to address how people engage with products, services, organisations and experiences. Students will learn three different creative approaches to design behavioural interventions and then use one approach as a team to frame and design an intervention.</td>
<td>Elective, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective (Group A)</td>
<td>Machine Learning for Design Engineers</td>
<td>The world is now full of examples of applications in which machine learning algorithms have transformed our lives. This module’s objective is to de-mystify the topic, and expose students, in an accessible manner, to both the basics of machine learning, and to some of its most important methods. Along the way we shall reveal some of machine learnings’ best kept secrets. To this end the course is structured as follows: Part 1 reviews basic concepts and elementary mathematics. Part 2 is organised around tutorials (labs and lectures) devoted to the topics of regression and classification, using mainstream machine learning methods. Part 3 has a focus on classification and regression from the perspective of Markovian methods and graph theory (page rank). Finally, Part 4 gives a birds-eye view of some frontier topics in the field. By the end of the course students will be familiar with the basics of machine learning, have experienced some of its popular methods, and applied some of its best known algorithms in a lab setting.</td>
<td>Elective, Years 3 &amp; 4</td>
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<tr>
<td>Elective (Group A)</td>
<td>Economics and Finance for Systems Design</td>
<td>The module focuses on core principles in micro-economics, accounting, finance, uncertainty modelling, and decision-making needed to assess the economic performance of engineering systems and products. It emphasizes hands-on applications through the analysis of a wide range of real-world systems in sectors such as aerospace, energy, Internet of things (IoT), manufacturing, and transportation. Part I focuses on the standard deterministic methods from micro-economic theory, finance and accounting that is required to assess a system’s financial viability. Topics include cost concepts, accounting, depreciation and taxes, time-value of money, single project evaluation, selecting alternatives, benefit-cost methods, and capital budgeting. Part II focuses on modern evaluation techniques, making explicit considerations of uncertainty and risks in the environment, markets, regulations, and technologies. Topics include break-even and sensitivity analysis, probabilistic risk analysis, Monte Carlo simulations, decision analysis, and flexibility in design (i.e., real options analysis). The role of machine learning and data analytics shall be explored (TBC – time permitting). These techniques capture the value of intelligent, dynamic decision-making in design and operations that are typically not recognised in standard design and project evaluation techniques. This module will give you an applied skillset to assess the financial viability of a product or system of your choice, find the best performing designs, and build-in flexibility to deal pro-actively with risk and uncertainty.</td>
<td>Elective, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective, I-Explore (inter departmental)</td>
<td>Multidisciplinary Project</td>
<td>The Multidisciplinary Project module has collaboration at its heart. You will work in a team of students from other departments to tackle some of the biggest challenges facing society. The module aims to provide students with the opportunity to undertake a group project by identifying a challenge, developing selected aspects of a solution, and scoping means for its realisation. Project areas will be multidisciplinary in nature and could touch on a variety of different topics including (but not limited to) Medical, Financial, Educational, Fitness or Lifestyle Technologies.</td>
<td>Elective, Years 3 &amp; 4</td>
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<tr>
<td>Elective (Group B)</td>
<td>Selected menu of other Electives from across College (Horizons, Business School)</td>
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<tr>
<td>Elective (Group B)</td>
<td>Robotics Research Projects</td>
<td>Robotics II will provide an overview of the latest research in the field of applied robotics, as well as a hands-on approach to bring critical skills together. This is done in a project-oriented course where students will design mechanical, electrical, and software subsystems of an overall functioning robot.</td>
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<td>Elective (Group B)</td>
<td>Sensing and the Internet of Things</td>
<td>The module aims to provide students with sufficient tools and techniques to develop software and hardware platforms for the Internet of Things, to obtain data from mobile and social sensors, perform data analysis, perform actuations, and to use key insights from data mining.</td>
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<tr>
<td>Elective (Group B)</td>
<td>Nano Design Engineering</td>
<td>This module will explore how nanotechnology with a focus on the crucial links between materials process at the nanoscale and the macroscopic properties they manifest, deducing design opportunities in tailor-made materials, devices and manufacturing. The final goal is taking such knowledge into practice as a new design tool to pave the way for next-generation energy and smart material technologies.</td>
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<tr>
<td>Elective (Group B)</td>
<td>Responsible Engineering, Design and Innovation</td>
<td>This module aims to introduce students to critical ways of thinking about technology products and their impact on individuals, their health and society. It will explores design techniques for understanding stakeholders’ values as well as ethical and responsible innovation frameworks. It will also introduce concepts drawn from philosophy of engineering and psychology.</td>
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<tr>
<td>Elective (Group B)</td>
<td>Design Analytics for the Sharing Economy</td>
<td>Collaborative consumption, AKA the sharing economy refers to businesses based on sharing resources and services, as opposed to traditional ownership-based models. Driven by new technologies such as blockchain, and more informed consumers, this new paradigm is causing a wave of disruption, and is leading to empowerment of citizens and communities in novel ways. Prominent examples are the peer-to-peer lodging company Airbnb. These types of business models are very different from the current standard approaches. The objective in this course is to provide a holistic view of sharing economy systems, starting with an overview of mathematics in designing shared services; then moving to some of the technologies that are enabling this revolution. Finally, we shall present a number of use cases that illustrate emerging services in this area.</td>
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The programme commences with key foundational skills and knowledge building in design and engineering fundamentals. Beginning with induction projects, the novice design engineer’s experience of the design process is steadily developed through a series of design engineering projects, enabling the student to see the practical application of content introduced in other modules as well as developing their own individual experience base and design process, communication and project management skills.

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<tbody>
<tr>
<td>Enterprise and Professional Practice</td>
<td>Communication in Design</td>
<td>Students will learn about creating compelling communication using a variety of techniques, including design drawing, engineering drawing, 3D computer aided design, 2D digital graphics, critical writing and oral presentation.</td>
<td>Core</td>
</tr>
<tr>
<td>Engineering Analysis</td>
<td>Computing 1</td>
<td>This module aims to introduce students to computer programming. They will learn the Python programming language using the Jupyter Notebook environment.</td>
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</tr>
<tr>
<td>Design Engineering Projects</td>
<td>Design 1</td>
<td>This module aims to develop students’ competence and self-confidence in the key elements of the creative design process. Specifically, this module seeks to help students.</td>
<td>Core</td>
</tr>
<tr>
<td>Electromechanical Engineering</td>
<td>EA 1.3 - Electronics</td>
<td>The Engineering Analysis 1 extended module develops fundamental skills in engineering analysis and applied mathematics, and consists of 3 subsections. This subsection is: Introduction to Electronics This part of the course covers topics ranging from high power networks to micro-control systems involved in electrical engineering.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>EA 1.2 - Energy and Design</td>
<td>This part of the course covers an introduction to the principles of energy, fluid mechanics, heat transfer and thermodynamics.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>EA 1.1 - Mechanics</td>
<td>The Engineering Analysis 1 extended module develops fundamental skills in engineering analysis and applied mathematics, and consists of 3 subsections. This subsection is: ‘Mechanics’. Physical principles of force, momentum, and interia. Principles of stress and strain. Study of the behaviour and motion of particles, vector notation and truss systems.</td>
<td>Core</td>
</tr>
<tr>
<td>Engineering Analysis</td>
<td>Engineering Mathematics</td>
<td>The module aims to provide students with sufficient mathematical tools and techniques to tackle a variety of engineering design problems.</td>
<td>Core</td>
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<tr>
<td>Physical Engineering</td>
<td>Production and Materials</td>
<td>Concepts and fundamentals to develop understanding types of materials: metals, polymers, ceramics and composites. The course commences with consideration of the simple properties used by engineers to quantify materials behaviour, such as hardness, strength, toughness etc. The course then considers metals, polymers, ceramics and composites in turn and relates the basic structure of each material type to its observed behaviour.</td>
<td>Core</td>
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</tbody>
</table>
Second and Third Years

In the second and third years, the range of engineering fundamentals, design thinking, creative problem solving, management and communication skills are developed, leading to a series of enterprise modules and projects where students develop skills in value propositions and turning their concepts into embodied concepts and proposals that are suited to corporate and enterprise roll-out. Students going onto the fourth year will then take part in a six-month industrial placement intended to give them real commercial experience and an opportunity to put the skills they have acquire into practice.

Second Year

<table>
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<tr>
<th>Theme</th>
<th>Title</th>
<th>Description</th>
<th>Core / Elective</th>
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<tbody>
<tr>
<td>Engineering Analysis</td>
<td>Big Data (now known as ’Data Science’)</td>
<td>The module aims to provide students with sufficient tools and techniques to explore small and large datasets, to perform data analysis and to use key insights from data mining.</td>
<td>Core</td>
</tr>
<tr>
<td>Engineering Analysis</td>
<td>Computing 2</td>
<td>The aim of this module is to provide students with the design concepts, theoretical foundations, and hands-on experience to efficiently construct their own algorithms and data structures for solving general or particular problems. To this end, the module covers the basic techniques for analysing the running time of algorithms, paradigms of algorithm design, and well-known data structures and high-level algorithms that a design engineer should be comfortable with and able to apply to further modules in the programme.</td>
<td>Core</td>
</tr>
<tr>
<td>Design Engineering Projects</td>
<td>Design 2</td>
<td>The module aims to develop students’ competence and self-confidence in the key elements of the sustainable design process.</td>
<td>Core</td>
</tr>
<tr>
<td>Physical Engineering</td>
<td>EA 2.1 M4DE Mechanics for Design Engineers</td>
<td>This part of the module applies fundamental concepts to Design Engineering problems for a range of structures, mechanisms and machine elements. The module explores the ideas of design evaluation and analysis through mechanics.</td>
<td>Core</td>
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</tbody>
</table>
| Physical Engineering         | EA 2.2 – Computer Aided Engineering        | The aims of the module are:  
- To introduce the fundamentals of the finite element method, a powerful computer-aided engineering tool  
- To introduce the basic procedures in carrying out practical finite element analyses  
- To provide the opportunity to use a commercial finite element software to analyse a range of problems in design engineering.                                                                 | Core            |
| Electromechanical Engineering| EA 2.3 – Electronics for Product and System Design | This module is a continuation of the DE1.3 Electronics module from the first year. It builds upon the knowledge, experience and competence from the first year module to include two main fundamental electronic engineering topics: signal processing and control engineering. | Core            |
| Design Engineering Projects  | Engineering Design Project                 | Design Engineering course focusing on holistic design processes applied to an engineering design problem. The course takes students through an engineering design problem from requirements through to final prototype and manufacturing specification/drawings. | Core            |
| Electromechanical Engineering| Gizmo (Physical Computing)                 | Many products rely on the effective design and implementation of mechanisms for their function. This course builds on DE1-PMat, DE1-EA1M and DE1-EA1E and introduces deterministic approaches to selection, synthesis and analysis of mechanisms and machine elements including bearings, shafts, gears, belts, chains, fasteners, clutches, brakes, seals, electromagnetic actuators, electrical circuits and sensors. | Core            |
### Third Year

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<th>Theme</th>
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<th>Core / Elective</th>
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</table>
| Enterprise and Professional Practice       | Innovation and Entrepreneurship                    | To provide design engineers with an understanding of:  
- Ability to assess market potential to take an informed decision to develop a venture  
- How to turn venture ideas into commercial products considering market needs (service thinking and marketing)  
  c) The structures, cultures, practices and financial underpinnings of enterprises  
  d) Management best practices and principles of good teamwork in agile design engineering environments | Core            |
| Design Engineering Projects                | Design Engineering Futures                         | Students form teams to develop analysis and then original designs in response to significant design engineering futures challenges or opportunities taking account of a wide range of social, environmental, technological and economic factors. The project based work builds on earlier design engineering skills, understanding and team working, but adds the introduction to techniques for futures analysis and innovation together with the requirement for high levels of prototype embodiment and validation through engagement with external stakeholders. As project deliverables, teams produce prototypes, project reports and exhibitions of their work. | Core            |
| Enterprise and Professional Practice       | Industry Placement (Part 1)                        | The Industry Placement modules aim to provide practical industry experience on a substantial design engineering related project, or collection of related projects. Lasting up to 6 months Industry Placement (Part 1) will run from April until June in the third year of study, directly followed by Industry Placement (Part 2) from July until September and the beginning of the fourth year of study. Utilising work carried out to develop CVs and Portfolios in the 2nd year Working in Organisations module students secure a placement with an organisation prior to the start of the placement period. They then work with the organisation for the duration of the placement. | Core            |
| Electromechanical Engineering              | Robotics                                           | This module provides an introduction to the field of robotics without requiring prior knowledge or experience in this topic. The students will be acquainted with the most important theoretic building blocks in robotics, namely, kinematics and dynamics of robots, robot control and motion planning algorithms. The module emphasizes both theoretical and practical aspects of robotics. It includes many tutorial and lab sessions that enable hands-on experience and provide the students with access to state-of-the-art robots. | Core            |
| Engineering Analysis                      | Optimisation                                       | The Optimisation course is designed to provide students with exposure to rational integration of design methodologies with the concepts and techniques of modern optimisation theory and practice. Through the course, the students will learn to rationalise and quantify an engineering system or product design problem, develop proper mathematical models to formulate a design optimisation problem, and apply appropriate optimisation algorithms to solve it. | Core            |

Electives: Two Year 3 electives as shown in next section (Fourth Year)
Fourth Year

The fourth year offers several electives (from 2020-21, in the autumn term as well as the spring term), allowing a greater degree of specialisation to students than earlier years. The fourth year also contains a high proportion of the programme’s commercially oriented modules. This was designed to consolidate the students’ industrial placement experiences with their previous academic studies and invest students with the skills in enterprise and design in commercial contexts that the programme aims to provide its graduates.

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<th>Theme</th>
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<tr>
<td>Enterprise and Professional Practice</td>
<td>Enterprise Roll Out</td>
<td>ERO aims to provide students with the knowledge and understanding they will need to create viable enterprises and deliver new products to market taking account of ambiguity and uncertainty; plan and implement appropriate prototyping strategies; effectively communicate and test ideas with target markets and stakeholders; explore and quantify commercial potential and develop a commercialisation strategy; evaluate risks and plan mitigation; develop and pitch a compelling value proposition to investors / funders; work in an effective and professional team planning and managing both strategy and team tasks; adopt best practice in their documentation and communication of progress and findings; embody their ideas and innovations sufficiently to exploit identified potential.</td>
<td>Core</td>
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<tr>
<td>Enterprise and Professional Practice</td>
<td>Industry Placement (Part 2)</td>
<td>The Industry Placement modules aim to provide practical industry experience on a substantial design engineering related project, or collection of related projects. Lasting up to 6 months. Industry Placement (Part 1) will run from April until June in the third year of study, directly followed by Industry Placement (Part 2) from July until September and the beginning of the fourth year of study. During Part 2 students are expected to be able to demonstrate completing their contributions to a significant project or collection of projects and to provide a reflective presentation to their host organisation and report on their professional development.</td>
<td>Core</td>
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<tr>
<td>Design Engineering Project</td>
<td>Solo Project (now known as 'Master’s Project')</td>
<td>The Master’s Project represents the culmination of the four year design engineering journey. Students have a high degree of choice of project topic based on outline briefs defined by an academic, an industry partner or the student themselves. This allows for specialism building on evolving interests, placement work and pattern of elective choices. Likewise the project deliverables and assessments allow for a very wide range of project types from theoretical research to projects with significant iterative physical prototyping. This reflects the wide potential of design engineering spanning: enterprise, design, physical and digital engineering subjects.</td>
<td>Core</td>
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<tr>
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| Elective (Group A) | Advanced Industrial Design | The module aims to:  
- Develop a high level understanding of contemporary industrial design principles and practice;  
- Follow a thorough practical design process to develop a PSS concept, with detail design for a 3D touchpoint of the system;  
- Powerfully communicate the outcomes in appropriate formats and with high professional ID standards for wider dissemination.  
Students will be predominantly focused on a practical design assignment supported with lectures and tutorials covering the following topics:  
Design for meaning: narrative, semiotics, visual language, aesthetics, form, Contextual Design, Brand strategy, Detail design, Colour, Materials, Finishes (CMF), Trend forecasting, Design for experience, service design, design for behaviour change, Design innovation with Business Model Canvas, design impact & validation, Advanced CAD visualisation. | Elective, Years 3 & 4 |
| Elective (Group A) | Audio Experience Design | An introduction to audio technology and perception, which includes acoustics, psychoacoustics, digital signal processing, audio recording techniques, audio reproduction techniques, 3D sound synthesis and reproduction and other selected topics such as data sonification and loudspeakers design. | Elective, Years 3 & 4 |
| Elective (Group A) | Design for Additive Manufacture (D4AM) | It is vital that the next generation of engineers and designers are equipped with the knowledge and skills necessary to harness the full potential of Industry 4.0. Part of this new industrial revolution is Additive Manufacturing; an exciting and fast developing area of digital manufacturing.  
This module provides engineering students with the platform needed to solve future industry challenges, get the most out of 3D printing technology and optimise designs. The module is aimed at engineering students who have an interest in 3D printing and advanced manufacturing methodology; who have the desire to become industry experts or academic researchers in this exciting area. | Elective, Years 3 & 4 |
<p>| Elective (Group A) | Design Psychology | Design Engineering encompasses a particular emphasis on human factors, the study of the way humans behave physically and psychologically in relation to certain environments, products, or services. Understanding human factors thus requires knowledge in psychology. Global challenges invariably require taking into account behavioural change in order to affect lasting solutions. Such challenges may be concerned with for example understanding patients’ behaviour and decision-making when non-adhering to medication, understanding human emotional processing within human–robot interactions or designing behavioural interventions to help foster sustainable behaviours. A deeper understanding of people’s behaviour is thus necessary to produce more effective human-centred products, experiences, systems, services, decision-making procedures and design processes. This module will provide an overview of basic psychological processes that govern human behaviour, emotions, attitudes, decision-making processes, as well as including aspects of user interface design and social science methodology. It will give budding Design Engineers a human-centric edge when working on their projects by providing a much-needed behavioural dimension to their design thinking. | Elective, Years 3 &amp; 4 |</p>
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<th>Theme</th>
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<tbody>
<tr>
<td>Elective (Group A)</td>
<td><strong>Machine Learning for Design Engineers</strong></td>
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<td>[ The world is now full of examples of applications in which machine learning algorithms have transformed our lives. This module’s objective is to de-mystify the topic, and expose students, in an accessible manner, to both the basics of machine learning, and to some of its most important methods. Along the way we shall reveal some of machine learnings’ best kept secrets. To this end the course is structured as follows: Part 1 reviews basic concepts and elementary mathematics. Part 2 is organised around tutorials (labs and lectures) devoted to the topics of regression and classification, using mainstream machine learning methods. Part 3 has a focus on classification and regression from the perspective of Markovian methods and graph theory (page rank). Finally, Part 4 gives a birds-eye view of some frontier topics in the field. By the end of the course students will be familiar with the basics of machine learning, have experienced some of its popular methods, and applied some of its best known algorithms in a lab setting.</td>
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<td>Elective, Years 3 &amp; 4</td>
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<tr>
<td>Elective (Group A)</td>
<td><strong>Economics and Finance for Systems Design</strong></td>
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<td>[ The module focuses on core principles in micro-economics, accounting, finance, uncertainty modelling, and decision-making needed to assess the economic performance of engineering systems and products. It emphasizes hands-on applications through the analysis of a wide range of real-world systems in sectors such as aerospace, energy, Internet of things (IoT), manufacturing, and transportation. Part I focuses on the standard deterministic methods from micro-economic theory, finance and accounting that is required to assess a system’s financial viability. Topics include cost concepts, accounting, depreciation and taxes, time-value of money, single project evaluation, selecting alternatives, benefit–cost methods, and capital budgeting. Part II focuses on modern evaluation techniques, making explicit considerations of uncertainty and risks in the environment, markets, regulations, and technologies. Topics include break-even and sensitivity analysis, probabilistic risk analysis, Monte Carlo simulations, decision analysis, and flexibility in design (i.e., real options analysis). The role of machine learning and data analytics shall be explored (TBC – time permitting). These techniques capture the value of intelligent, dynamic decision-making in design and operations that are typically not recognised in standard design and project evaluation techniques. This module will give you an applied skillset to assess the financial viability of a product or system of your choice, find the best performing designs, and build-in flexibility to deal pro-actively with risk and uncertainty.</td>
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<td>Elective, Years 3 &amp; 4</td>
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<tr>
<td>Elective, I-Explore (interdepartmental)</td>
<td><strong>Multidisciplinary Project</strong></td>
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<td>[ The Multidisciplinary Project module has collaboration at its heart. You will work in a team of students from other departments to tackle some of the biggest challenges facing society. The module aims to provide students with the opportunity to undertake a group project by identifying a challenge, developing selected aspects of a solution, and scoping means for its realisation. Project areas will be multidisciplinary in nature and could touch on a variety of different topics including (but not limited to) Medical, Financial, Educational, Fitness or Lifestyle Technologies.</td>
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<td>Elective, Years 3 &amp; 4</td>
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<tr>
<td>Theme</td>
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<tr>
<td>Electives</td>
<td>Selected menu of other Electives from across College (Horizons, Business School)</td>
<td>Robotics II will provide an overview of the latest research in the field of applied robotics, as well as a hands-on approach to bring critical skills together. This is done in a project-oriented course where students will design mechanical, electrical, and software subsystems of an overall functioning robot.</td>
<td>Electives, Years 3 &amp; 4</td>
</tr>
<tr>
<td>Elective (Group B)</td>
<td>Robotics Research Projects</td>
<td></td>
<td>Elective, Year 4 only</td>
</tr>
<tr>
<td>Elective (Group B)</td>
<td>Sensing and the Internet of Things</td>
<td>The module aims to provide students with sufficient tools and techniques to develop software and hardware platforms for the Internet of Things, to obtain data from mobile and social sensors, perform data analysis, perform actuations, and to use key insights from data mining.</td>
<td>Elective, Year 4 only</td>
</tr>
<tr>
<td>Elective (Group B)</td>
<td>Nano Design Engineering</td>
<td>This module will explore how nanotechnology with a focus on the crucial links between materials process at the nanoscale and the macroscopic properties they manifest, deducing design opportunities in tailor-made materials, devices and manufacturing. The final goal is taking such knowledge into practice as a new design tool to pave the way for next-generation energy and smart material technologies.</td>
<td>Elective, Year 4 only</td>
</tr>
<tr>
<td>Elective (Group B)</td>
<td>Responsible Engineering, Design and Innovation</td>
<td>This module aims to introduce students to critical ways of thinking about technology products and their impact on individuals, their health and society. It will explore design techniques for understanding stakeholders’ values as well as ethical and responsible innovation frameworks. It will also introduce concepts drawn from philosophy of engineering and psychology.</td>
<td>Elective, Year 4 only</td>
</tr>
<tr>
<td>Elective (Group B)</td>
<td>Design Analytics for the Sharing Economy</td>
<td>Collaborative consumption, AKA the sharing economy refers to businesses based on sharing resources and services, as opposed to traditional ownership-based models. Driven by new technologies such as blockchain, and more informed consumers, this new paradigm is causing a wave of disruption, and is leading to empowerment of citizens and communities in novel ways. Prominent examples are the peer-to-peer lodging company Airbnb. These types of business models are very different from the current standard approaches. The objective in this course is to provide a holistic view of sharing economy systems, starting with an overview of mathematics in designing shared services; then moving to some of the technologies that are enabling this revolution. Finally, we shall present a number of use cases that illustrate emerging services in this area.</td>
<td>Elective, Year 4 only</td>
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<tr>
<td>Theme</td>
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<tr>
<td>Elective (Group B, I-Explore)</td>
<td>Designing Interventions for Behavioural Change</td>
<td>This module will develop competence in scoping, analysing and developing creative interventions for behaviour change. Possible interventions include wearables to improve health, products for more sustainable consumption and policy to improve tech-enabled business models. Students will be exposed to several creative behavioural frameworks that can be applied to the development of (digital and physical) product, services, events, policy and organisational interventions. Designing Interventions for Behavioural Change offers a deep dive into the use of practical theories to address how people engage with products, services, organisations and experiences. Students will learn three different creative approaches to design behavioural interventions and then use one approach as a team to frame and design an intervention.</td>
<td>Elective, Year 4 only</td>
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</table>
10.4 Industry Placement

Students going onto the third and fourth year of the DE MEng take part in a six-month industrial placement intended to give real commercial experience and an opportunity to put the skills acquired into practice.

The placements will run April–September in the third year of study. Third year exams will be taken early to ensure that all students will be present in College. The School’s Placements Officer, María Apud Bell and The Teaching Office Team shall arrange and select a number of appropriate placement companies and industrial supervisors. These will be prepared to provide suitably challenging and well-defined project objectives to students. Companies will be generally expected to pay the students at a level appropriate for a new graduate.

Arranging your placement
During Year 2, sessions will be run with the Placements Officer to inform you of the placements procedure. Attendance at these sessions is mandatory.

The School will provide a list of companies and pre-agreed placements through an online portal. Students will need to find adverts of interest to them, and then go through the company’s individual application and interview process to secure their placement. Alternatively, students are able to source a position with a company not offered by the College, however, this will need to be approved with the School’s Placements Officer to ensure it is appropriate for the learning outcomes and meets criteria in risk assessments, where appropriate.

Supervision and Assessment
Students will have one Placement Tutor (a member of School Academic staff) and one industrial supervisor (a member of staff at the host company). The module will be assessed against objectives by their Placement Tutor on the basis of an interim and final report, a presentation, an exhibition, and an employer’s report from the industrial supervisor.

Preparation
In preparation for your placement it is important that you develop your skills-base in areas relevant to employment and your CV and portfolio. We strongly encourage students to ensure that they manage their projects effectively in DE1, DE2 and DE3 as well as extra-curricular activities and capture the outputs and work for inclusion in your portfolio and CV.

IMPORTANT
Unless your industry placement is based in London, you will only need accommodation during autumn and spring terms of Year 3. The duration of your placement also means that you will be working during the summer break between the third and fourth years.

Further information
Early in your third year you will be provided with a separate handbook that contains the most updated information on the placement details for your year.

See the School web page on industry placements here: https://www.imperial.ac.uk/design-engineering/industry/

10.5 Graduation

With your final-year taught modules examined and your project work written up and presented, the degree programme is over. Academic and administrative staff now integrate all of the module marks and any other relevant information to decide, at a final meeting, the degree class to award.

The Board of Examiners
The Board of Examiners consists of every academic member of staff plus the External Examiner/s.

There are two meetings interspersed with fact-finding activities and reviews, this procedure leads to a final mark for graduating students and to a decision on progression for all others.

The process begins with the collection of all marks registered during the year for every student. Checks are made at this stage to ensure that each student has a mark for each module for which they were registered.

Verified marks are added to those brought forward from previous years of study. Finally a program which implements the progression rules for each student’s year of entry is run to update the database and arrive at a mark for the current year.

A Pre-Exam Board Meeting, attended by a core group of academics including the Examinations Officer, DUGS and members of the Teaching Office take an overview of the year’s results. Special cases are discussed and exam or coursework marks for modules which may require moderation are identified. The group considers preliminary outcomes for individual students. In particular, College regulations require the review of overall degree marks that are within a particular threshold for the consideration of uplift. There can be increased provision applied to for candidates with valid mitigating circumstances. The exact mechanism will vary for students on the blended (DE4 in AY2021/22) and new curricula (all other years); for the former see the Scheme for the Award of Honours in appendix E below. For the latter please see the College’s single set of Taught Academic Regulations.

The External Examiners — senior academics from another UK university — now arrive. They spend some days reviewing all marked examination scripts and coursework marked during the year, concentrating on individual project reports and group project results for students
who might be considered for degree class promotion. The Pre Exam Board Meeting and the External Examiners’ visit ensure that all relevant information is reviewed in preparation for the Final Board of Examiners Meeting.

**IMPORTANT**
The External Examiners may decide, for any reason, that they wish to interview a student in person.

The Final Board of Examiners Meeting is attended by all academic staff (who assess students and are therefore ‘Examiners’), the External examiners and a representative from Registry to advise on procedures and regulations. This is the occasion on which the recommendation for degrees and degree classes (honours) are formally agreed. At this point a decision is made on whether a student passes/fails a year or will be required to take a Supplementary Qualifying Test (SQT).

A decision is also made on:
- Whether to carry the information forward to the following year;
- Whether a graduating student is awarded an appropriate compensation in marks.

**NOTE**
At no stage is the proportion of results in each degree class used to implement a ‘quota’, or taken into account in any way at all. In theory every student could get a first!

**External Examiners, 2021-22**
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.

During your programme you may be invited to meet your external examiners to discuss how you have found the programme or for a type of assessment called a viva voce (verbal exam). It not appropriate however, for you to seek to submit complaints or representations directly to external examiners or to seek to influence them other than by giving feedback in a meeting. Inappropriate communication towards an examiner would make you liable for disciplinary action.

External Examiners for academic year 2020/21:
DE1, DE2:
**Professor Neil J Mansfield**
Head of Department of Engineering, Nottingham Trent University, UK

DE3, DE4:
**Professor Fiona Charnley**
Associate Professor of Circular Economy, Exeter Business School

A summary of External examiners reports from the previous academic year can be found here: www.imperial.ac.uk/about/governance/academic-governance/academic-policy/external-examining/

**The Graduation Ceremony**

On what the College calls Commemoration Day in October after your final year, you will arrive at the graduation ceremony as an undergraduate, participate as a graduand and emerge as a graduate!

Invitations are issued during August. The ceremony takes place in the Royal Albert Hall, Kensington, London. Attendance is not required; it does not affect the awarding of your degree, but few graduands manage to resist the allure of the occasion in the presence of family and peers. The School will organise a reception; we shall pass you more details nearer the time. However if you wish to know more feel free to ask the Teaching Office Team.

**Graduation website (link)**
11. General Information
11.1 College Principles

Imperial College London embodies and delivers world class scholarship, education and research in science, engineering, medicine and business, with particular regard to their application in industry, commerce and healthcare.

The College is diverse and international – it comprises academic staff, students and support staff of varied disciplines and backgrounds. It champions collaboration, actively opposes discrimination and recognises the importance of making a positive impact in the wider community.

The full College Principles can be found here:

[College Principles (link)]

11.2 Health Services

A list of College health and welfare services is posted throughout the School and College. You will probably need to make little or no use of these services, but you should register as an NHS patient with the Health Centre within the first few weeks of term.

Health Centre

The College has its own Health Centre that is only for Imperial Staff and Students. This is run by the National Health Service (NHS).

Registration

On the Sunday before Welcome Week, the Health Centre will be open for students in local halls of Residence to register, and to provide information on vaccinations required. Health centre staff will also be working late sessions on Monday, Tuesday, Wednesday and Thursday of Welcome Week for new registrations and immunisations.

Address

40 Prince’s Gardens Southside, Watts Way, London SW7 1LY

24-hour telephone service
+44 (0)20 7584 6301

Emergencies
(Security) 4444 (internal)
020 7589 1000 (external)

Internal extension
49375/6

Email
imperialcollege.hc@nhs.net

Term time opening hours
08.00–18.00 Monday, Wednesday, Thursday and Friday
08.00–13.00 Tuesday

Vacation time opening hours
08.00–17.00 Monday, Wednesday, Thursday and Friday
08.00–13.00 Tuesday
Closed at weekends and on public holidays

On weekdays during the Christmas and Easter closures, the Health Centre runs an emergency clinic only, 08.00–10.00. Reception is open 08.00–13.00.

Find a Doctor (link)

Health Centre Website (link)

National Health Service website (link)

Out of Hours Services

If you are registered with the Health Centre as a National Health Service (NHS) patient, and need medical advice outside normal opening hours please telephone the surgery as usual. Follow the recorded instructions which explain how to contact its out-of-hours service.

The Health Centre provides a 24-hour emergency service for its NHS registered patients only.

If you are not eligible to register there, you may use its on-site services during normal working hours only. Make sure you are registered with an NHS General Practitioner near where you live during term, in case you need the doctor to visit you there or need medical advice out-of-hours.
11.3 Mental Health Services

Mental Health issues are not uncommon and 1 in 4 people in the UK will experience a mental health problem each year*. If you find that you are struggling to cope with any aspect of your life, it is better to seek help earlier rather than later.

Short-term counselling is offered to all registered students of Imperial College London. It is free and confidential: www.imperial.ac.uk/counselling/
The above website also includes links to various resources that provide mental health information and advice.

If you are registered as an NHS patient you are also able to access free Mental Health services via the NHS although waiting times can be long.

**IMPORTANT**
If you are having suicidal thoughts, it is important for you to talk to someone and tell them how you are feeling. This could be a family member, a friend, a member of College staff, a health professional, a helpline or whoever you feel comfortable talking to.

If you are considering killing yourself you should contact the emergency services (999) immediately.

The Samaritans is a charity organisation who provide services to those who are experiencing mental health issues. You can contact their helpline, via phone on 116 123 (free from all phones including mobile) or email jo@samaritans.org

Samaritans website (LINK)

*Source

11.4 Security

Imperial is a relatively public space, and, sadly, thefts can occur from time to time. It is essential to look after your own property and to remain vigilant. Take great care of both your personal property and that of the College.

If you are planning to use a bicycle in London, please be careful and lock it securely. You can find more information about this at the link below.

Important

Information Security Policy (link)

**IMPORTANT**
If you lose anything, report it promptly to the security officer in Sherfield building (ref. 20 on campus map, internal tel. 4444). It is especially important to report a lost or stolen ID card. If you find an ID card or any apparently lost property in the school, please hand it in to the Teaching Office team or a member of campus Security.

Security website (link)

Securing your bike (link)

SafeZone App

SafeZone is an app through which you can quickly and directly contact the Security team whenever you need them. In an emergency situation, whether you’re in need of First Aid or want to report an incident on campus, SafeZone allows you to be immediately put in touch with a member of our Security team and, at the touch of a button, can share your location and personal profile so that they can respond quickly and effectively to your specific needs. It also allows the entire College community to stay informed in the event of a major incident in London or wherever you may be in the world. SafeZone also provides information on other services, such as real-time updates on the College shuttle bus.

SafeZone is optional to register to and is now available to download on the Apple and Android App stores.

All existing phone numbers for the Security team are still operational. In the event of an emergency, you can still call 4444 from any internal College phone. In the event of a wider incident in London, you can now also call 0300 131 4444, Imperial’s Emergency Recorded Message Line, which will point you in the direction of up-to-date information and advice.
11.5 Your ID Card

The College-wide security system of ID swipe cards controls and monitors access to halls of residence, and to the School building and certain rooms outside normal hours. Your ID card will be your passport for the duration of your course; get it as soon as you can, and treat it with respect.

**IMPORTANT**
Lending your swipe card to friends or acquaintances, even for a short time, is a serious offence which can result in serious disciplinary action.

Lost your ID card?

Contact the ID card Office (link)

11.6 Expense Claims

From time to time your participation in modules shall entail claiming expenses. Although the type of expense might shift from module to module, the form is the same and is linked to below.

**It is the E1 form you will want.** Please note that generally you should complete the section on the form near foot of the document called “Subsistence / Hotels / Incidental / Others”. Where claims arise, please ask the Module Staff for details.

https://www.imperial.ac.uk/finance/financial-services/expenses/

11.7 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.

Student Disciplinary Procedure (LINK)

11.8 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 (link)

11.9 Health and Safety

Design engineers make things, test things and deal with potentially dangerous quantities, e.g. chemicals, power, energy, force, pressure, mass and velocity.

To be a professional engineer your consciousness of risk, and concern for your own and others’ safety, must be considered and instinctive. We will emphasise this from day one. During the welcome week, every new student must attend the School Safety Briefing.

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.

REPORTING ACCIDENTS
All accidents and incidents should be reported online at www.imperial.ac.uk/safety

CORONAVIRUS: KEEPING YOU SAFE
Keeping you safe is a top priority for us. We continue to be guided by the latest official government guidance. At Imperial, we also have some of the world’s leading
researchers of the coronavirus (COVID-19) pandemic who are advising governments around the world on the most effective measures to take to protect people from the virus as well as developing and testing vaccines.

Government guidance will continue to change in the UK over the coming months and we are regularly updating our plans for your education delivery.

You can find the latest guidance on the measures we are taking for your safety, plus information about the healthcare support available to you at: www.imperial.ac.uk/about/covid-19/students/keeping-you-safe/

The College’s Health and Safety Policy (LINK)
The College Safety Department (LINK)
Occupational Health Requirements (LINK)

The School’s safety contact is:
Name: Dr Connor Myant
Location: 1M05, RCS1 Observatory Building
Phone: +44 (0)20 7594 9893
Email: connor.myant@imperial.ac.uk

IMPORTANT
The College is required, under the Health and Safety at Work Act (1974), to formally acquaint all its members with their legal responsibilities for the maintenance of their own safety and that of others. You must read and understand the linked Health and Safety Policy Statement, and will be required to sign a form to confirm. Failure to attend the Safety Briefing will forfeit the protection offered by the Act and render you vulnerable to personal prosecution in the courts. In any event, you will certainly not be allowed to work in the School workshops and laboratories.

11.10 In Your Hall of Residence

If you’re staying in College accommodation you will have access to a range of support within your hall. All halls have a Hall Warden 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 per week.

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

Each hall also 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.

11.11 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 service
- 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
12. Imperial College Union
Every student who registers at Imperial College London automatically becomes a member of the Student’s Union. As well as providing an overall framework for student representation, ICU provides a wide range of information, facilities, support and social events.

Imperial College London Union (link)

12.1 President of Imperial College Union

Welcome to Imperial College. Congratulations on making it here. Imperial is, by all accounts, one of the world’s most prestigious universities, and studying here will give you opportunities you simply wouldn’t have elsewhere. This is a well-funded institution, with extremely capable students and superb research facilities. Take advantage of both: working with others, and seeking out opportunities beyond your course, is what makes a degree here worthwhile.

Life in London and at Imperial has adapted to a ‘new normal’ as a result of the COVID-19 pandemic, with safety measures in place to keep you safe. With the UK’s progress on mass vaccination, the end of the pandemic here is in sight, but there remains much uncertainty around what restrictions will exist in the coming months. However, this shouldn’t stop you having a really fantastic experience here.

Imperial has plenty to offer outside study too, giving you the chance to try something new. London is a well-connected, diverse city, where almost anything you could want is only a walk, bike, or tube ride away. We’re a stone’s throw from some incredible museums, parks, and venues. We also have hundreds of student-led societies covering a very wide range of activities, and a selection of venues running fun events throughout the year.

These societies and venues are administered by your student union, the Imperial College Union. We also support networks of departmental student representatives, campaigns, and volunteering opportunities. The Union is led by students, for students. The four deputy presidents and I are all democratically elected students who have taken a year out to work full-time on improving your experience at Imperial. The Union has been working hard to protect your interests and improve Imperial’s offer to students throughout the pandemic, and we will continue to do so over the course of the coming academic year.

University is a bit of a sea change: you’re in a place where, likely for the first time in your education, you have a good degree of control over how you learn. Take advantage of this. Consider running in our autumn elections, be sure to join a society or two, and above all, make your voice heard. If there’s something you want to see changed, we can work together to make it happen. No matter what problems you have or opportunities you’re looking for, we’re here to help. Our office is on Level 2 in Beit Quadrangle, and you can check out our website for more information.

Best of luck – I hope you have a fantastic year,

Lloyd James
Imperial College Union President 2021-22
union.president@imperial.ac.uk
imperialcollegeunion.org

12.2 Student Representatives

In our School, the Union has three Department Reps (two academic and one wellbeing), and two reps per year group (one academic and one wellbeing). You can find the description of these roles here:

Academics Reps (link)

Roles and Responsibilities of Wellbeing Reps (Appendix F)

Election of Dep Reps
The Department Reps are elected via the Union’s eVote service. All UG students will be invited to a gathering in week 1 of the autumn term, where the candidates will run through their manifesto. After the meeting the eVote system opens and students have a chance to campaign for two weeks, after which the eVote closes. The results will be announced shortly thereafter.

Election of Year Reps
The two year reps per each cohort will be elected during a session, coordinated by the Senior Tutor, timetabled in Week 4 of the autumn term.

2021-22 Reps
The School academic and wellbeing reps for the academic year are:
12.3 Clubs and Societies

This is a demanding course and we expect you to work hard; but we hope you will ‘play hard’ as well. Opportunities range from the hundreds of student societies to the social and cultural resources of one of the world’s greatest cities.

Since there are over 8000 undergraduate students at Imperial, it is virtually certain that your interests – however unusual – will be shared by others. The clubs and societies formed by students and supported by Union funding will be competing to attract new members at the Union Fair on the first Tuesday of autumn term. More than 300 societies are affiliated to the Student Union, and every one of them will want you to join.

IC Union clubs and societies (link)

London offers an incredible range of entertainment and culture, both nearby and further afield. The substantial price reductions available to students make this expensive place extremely good value.

Take advantage of being here; few of you will have a second chance of university education.

12.4 Imperial College Advanced Hackspace

Imperial College Advanced Hackspace is a unique community of over 2000 like-minded makers, hackers, inventors and entrepreneurs across the University. Supported by an extensive suite of prototyping equipment and professional experts, ICAH has created a vibrant environment that makes it the best place in the world to turn idea into a reality. ICAH is free to all College members and the community continues to grow with 100 new users joining each month.

Imperial College Advanced Hackspace (link)

Imperial College Robotics Society

Imperial College Robotics Society is a student-led University club aiming to increase robotics interest at Imperial College London and across the UK. They run workshops, competitions and lectures to teach about robotics, electronics and software as well as providing help (financial and technical) to students looking to start a robotics project.

Imperial College Robotic Society (link)

CAUTION: MANAGE YOUR TIME EFFECTIVELY

Be selective — don’t fall into the trap of trying to do too many things! There are only 168 hours in every week.

12.5 Design Engineering

Design Engineering Society

Imperial College
The Imperial Design Engineering Society is a departmental society for the Dyson School of Design Engineering. Students of the School are automatically members.

They aim to provide their members with extracurricular and social events to further broaden their experience whilst they study at Imperial.

DesSoc Website (link)
Contact (email)

12.6 College Support and Welfare

Coming to Imperial can be quite daunting if you are moving away from home for the first time — especially if you are also new to the UK. The College is possibly larger than any institution you’ve attended before, and the freedom of life in it is immense. The culture shock can be a challenge, but there are resources at both School and College level to help you through.

A single website (link at the end of this section) now coordinates access to the entire range of support and welfare services offered by the College and the Students’ Union.

The main areas covered are:
• Academic appeals and regulations
• Careers Advisory Service
• Chaplaincy
• College Hardship/Access to Learning Funds
• College Tutors
• Director of Student Affairs
• Disability Advisory Service
• English language support
• Equality
• Health Centre
• ICU Advice Centre
• ICU student representation
• International student support
• Maths support (METRIC)
• NHS Dentist Student
• Counselling Service
• Wardens

Student Space (link)

12.7 Imperial College Union 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.

The Advice centre is your first port of call if you are experiencing difficulties during your time at university.

Their advice is:
• **Free**: you don’t have to pay to get advice
• **Confidential**: they won’t tell anyone that you’ve gone to see them and they won’t share with anyone else what you tell them unless in exceptional circumstances (see their confidentiality policy on their website, below.)
• **Impartial**: they offer the advice that is best for you, they are not influenced by any other organisation
• **Independent**: They are not part of the Imperial College so their advice is not influenced by The College or School.
• **Non-judgemental**: as long as you are a student they will offer the best advice they can give you and they will not judge your position or the next step you decide to take.

Imperial College Union Advice Centre (link)
13. Appendices
Appendix A - Campus Map

Information about the accessibility of our campuses is available online through the AccessAble accessibility guide: https://www.accessable.co.uk/organisations/imperial-college-london
Appendix B - Programme Modules Gantt Chart for the years and modules that are running in 2021-22
Appendix C - Student Feedback Chart

Design Engineering | MEng Student feedback & quality enhancement flow chart (academic points*)

STAFF

- Module leaders
- Associate module leaders
- Personal tutors
- Year Coordinators x4
- Academic Management team (DUGs, Senior Tutor, Academic tutor)
- Examinations officer

QUALITY ENHANCEMENT

Termly and annual Committees and QE processes including Teaching Themes, Curriculum Development, School Teaching Committee, Annual module review etc.

STUDENTS

- Year Representatives
  - DE4 x2
  - DE3 x2
  - DE2 x2
  - DE1 x2

- Department Representatives (x2 academic, 1 wellbeing)

- Design Society

*Also ref separate information about communication of welfare points

Ongoing feedback and enhancements based on points raised

General points about individual study (anytime, & 3/4 timetabled slots per term)

General points about the modules and the year (anytime, & 1 arranged slot per term)

Significant points about the modules and year (anytime)

Feedback and oversight on all points raised and action planning to Reps, SSCC and year groups as needed

Reporting and discussion of points arising in 1 arranged slot per term

Discussion of points arising in 1 arranged slot per year

Participation in Industry liaison meetings

IC and National Student Satisfaction data gathering

Staff Student Consultative Committee (SSCC)

Student Online Evaluation tool (SOLE) and National Student Survey (NSS) data

External Examiner/s

Industry liaison (Industry Advisory Board, Panel & Partners)

Annual QE processes inform overall development of module delivery and student experience

Providing information and feedback

Feedback loop: information, actions & progress details provided

Version 1.1 10/01/18
## Appendix D - Assessment methods

Per 10.3 above, due to curriculum review, we shall display a version below per cohort year for your ease of reference, based on year of entry.

### New programme

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Module</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Core</td>
<td>Computing 1: Introduction to Scientific Computing</td>
<td>100% Exam (two in class timed coding assessments weighted 40% and 60%)</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Computing 2: Applications</td>
<td>100% Coursework (50% Technical Report, 50% code submission)</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Electronics 1: Introduction to Electronic Circuits, Sensors, and Mechatronics</td>
<td>40% Practical + 60% Exam</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Engineering Mathematics</td>
<td>100% Exams (80% exams + 20% progress tests)</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Human centred Design Engineering</td>
<td>85% Coursework + 15% Practical</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Introduction to Design Engineering</td>
<td>70% Coursework + 5% Practical + 25% Exam</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Materials &amp; Manufacturing (formerly known as 'Production &amp; Materials')</td>
<td>50% Coursework + 50% Exams</td>
</tr>
<tr>
<td>1</td>
<td>Core</td>
<td>Solid Mechanics 1</td>
<td>20% Coursework + 80% Exam</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Data Science (formerly known as 'Big Data')</td>
<td>70% Coursework + 30% Exam</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Electronics 2 Signals, Systems, and Control</td>
<td>40% Practical + 60% Exam</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Finite Element Analysis (formerly known as 'Computer Aided Engineering')</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Gizmo (Physical Computing)</td>
<td>65% Practical + 35% Coursework</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Industrial Design Engineering (formerly known as 'Engineering Design Project')</td>
<td>50% Practical + 50% Coursework</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Solid Mechanics 2 (formerly known as 'Mechanics for Design Engineers (M4DE)')</td>
<td>15% Coursework + 85% Exam</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Sustainable Design Engineering (formerly known as 'Design 2')</td>
<td>30% Practical + 70% Coursework</td>
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<tr>
<td>2</td>
<td>Core</td>
<td>Thermofluids: Energy &amp; Design</td>
<td>100% Coursework (worksheets)</td>
</tr>
<tr>
<td>2</td>
<td>Core</td>
<td>Working in Organisations</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>Design Engineering Futures (formerly known as 'Group Project')</td>
<td>70% Practical + 30% Coursework</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>Industry Placement (Part 1)</td>
<td>100% Coursework (Pass / Fail)</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>Innovation and Entrepreneurship</td>
<td>30% Practical + 70% Coursework</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>Optimisation</td>
<td>15% Practical + 35% Coursework + 50% Exam</td>
</tr>
<tr>
<td>3</td>
<td>Core</td>
<td>Robotics 1: Intro to Robotics</td>
<td>36% Coursework + 64% Exam</td>
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<td>3</td>
<td>Core</td>
<td>Robotics 2: Applied Robotics</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>Year</td>
<td>Type</td>
<td>Module</td>
<td>Assessment</td>
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<td>---------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Advanced Industrial Design</td>
<td>40% Practical + 60% Coursework</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Audio Experience Design</td>
<td>100% Practical (40% in class tests + 60% installation)</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Design for Additive Manufacturing (D4AM)</td>
<td>60% Practical + 40% Coursework</td>
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<tr>
<td>3/4</td>
<td>Elective</td>
<td>Design Psychology</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Designing Interventions for Behavioural Change</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Machine Learning for Design Engineers</td>
<td>30% Coursework + 70% Exam</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Economics for Finance and Systems Design</td>
<td>50% Project + 50% Exam</td>
</tr>
<tr>
<td>3/4</td>
<td>Elective</td>
<td>Multidisciplinary Project</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>4</td>
<td>Core</td>
<td>Enterprise Roll Out</td>
<td>40% Practical + 60% Coursework</td>
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<td>4</td>
<td>Core</td>
<td>Industry Placement (Part 2)</td>
<td>20% Practical + 80% Coursework</td>
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<td>4</td>
<td>Core</td>
<td>Master’s Project (formerly known as ‘Solo Project’)</td>
<td>25% Practical + 75% Coursework</td>
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<tr>
<td>4</td>
<td>Elective</td>
<td>Robotics Research Projects</td>
<td>25% Practical + 75% Coursework</td>
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<tr>
<td>4</td>
<td>Elective</td>
<td>Sensing and Internet of Things</td>
<td>100% Coursework</td>
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<td>4</td>
<td>Elective</td>
<td>Nano Design Engineering</td>
<td>100% Coursework</td>
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<tr>
<td>4</td>
<td>Elective</td>
<td>Responsible Engineering, Design and Innovation</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>4</td>
<td>Elective</td>
<td>Design Analytics for the Sharing Economy</td>
<td>30% Coursework + 70% Exam</td>
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## Blended programme
### (2018-19 entry cohort: AY2021-22 DE4)

<table>
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<th>Year</th>
<th>Type</th>
<th>Module</th>
<th>Assessment</th>
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<tr>
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<td>Core</td>
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<tr>
<td>1</td>
<td>Core</td>
<td>Computing 1</td>
<td>100% Coursework</td>
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<tr>
<td>1</td>
<td>Core</td>
<td>Design 1</td>
<td>80% Coursework + 20% Exam</td>
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<tr>
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<td>Core</td>
<td>Engineering Analysis 1.3 - Electronics</td>
<td>40% Coursework + 60% Exam</td>
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<td>Core</td>
<td>Engineering Analysis 1.2 - Energy and Design</td>
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<td>Engineering Analysis 1.1 - Mechanics</td>
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<td>Core</td>
<td>Production and Materials</td>
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<td>Core</td>
<td>Computing 2</td>
<td>100% Coursework</td>
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<td>2</td>
<td>Core</td>
<td>Design 2</td>
<td>100% Coursework</td>
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<td>15% Coursework + 85% Exam</td>
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<td>Engineering Analysis 2.2 - Computer Aided Engineering</td>
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<td>2</td>
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<td>Engineering Analysis 2.3 - Electronics for Product and System Design</td>
<td>40% Coursework + 60% Exam</td>
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<td>Engineering Design Project</td>
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<td>Industry Placement Part 1</td>
<td>100% Coursework (Pass / Fail assessed)</td>
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<td>100% Coursework</td>
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<td>Core</td>
<td>Optimisation</td>
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<td>3</td>
<td>Core</td>
<td>Robotics</td>
<td>70% Coursework + 30% Exam</td>
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</table>

**Electives: Two Year 3 electives as shown in section below (Fourth Year)**

<p>| 3/4 | Elective | Advanced Industrial Design | 100% Coursework |
| 3/4 | Elective | Audio Experience Design (not running in 2020-21) | 100% Coursework |
| 3/4 | Elective | Design for Additive Manufacture (D4AM) | 100% Coursework |
| 3/4 | Elective | Design Psychology | 100% Coursework |
| 3/4 | Elective | Designing Interventions for Behavioural Change | 100% Coursework |
| 3/4 | Elective | Machine Learning for Design Engineers | 30% Coursework + 70% Exam |
| 3/4 | Elective | Economics for Finance and Systems Design | 50% Project + 50% Exam |
| 3/4 | Elective | Multidisciplinary Project | 100% Coursework |
| 3/4 | Elective | Design Led Innovation and Enterprise (DLIE) (did not run in 2020-21) | 100% Coursework |
| 4    | Core | Enterprise Roll Out | 100% Coursework |
| 4    | Core | Industry Placement Part 2 | 100% Coursework (80% of which on Pass / Fail basis) |
| 4    | Core | Solo Project (renamed 'Master’s Project') | 100% Coursework |
| 4    | Elective | Robotics Research Projects | 25% Practical + 75% Coursework |
| 4    | Elective | Sensing and Internet of Things | 100% Coursework |
| 4    | Elective | Nano Design Engineering | 100% Coursework |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Module</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Elective</td>
<td>Responsible Engineering, Design and Innovation</td>
<td>100% Coursework</td>
</tr>
<tr>
<td>4</td>
<td>Elective</td>
<td>Design Analytics for the Sharing Economy</td>
<td>30% Coursework + 70% Exam (viva format)</td>
</tr>
</tbody>
</table>
Appendix E – Assessment Structure & Exit Routes

Curriculum Review
The MEng programme has recently undergone a curriculum review (for more information, see also section 10.3 above). Students commencing since September 2019 will undertake the revised curriculum (referred to as the ‘new programme’ in this handbook). Those students may disregard the section below on the Scheme for the Award of Honours and should instead refer to the College’s Academic Regulations as here: https://www.imperial.ac.uk/about/governance/academic-governance/regulations/.

Scheme for the Award of Honours
(applicable to 2021-22 Year 4 students only):
The following document sets out the assessment structure of degrees awarded in the School of Design Engineering that predate the recent curriculum review exercise, thus applies to MEng years 3 and 4 in the current academic year, 2020–21. It includes the criteria for progression and the criteria for the honours classifications. The degrees are composed of Parts corresponding to the years of the course: four Parts for an MEng and three Parts for a BEng. Please note that a BEng exit award is possible in exceptional circumstances, however this is not a route that we recommend normally. Please see the end of this appendix for more information on the BEng and other exit routes.

For candidates at the end of the degree programme, a decision is made on whether the candidate has passed and if so, what classification of honours is to be awarded. These decisions are made by a Board of Examiners which normally meets around mid-July and is composed of all teaching staff involved with the degree programmes plus two External Examiners appointed from other UK universities. The Mitigating Circumstances panel will give advice to the Board of Examiners on how mitigating circumstances, formally notified in advance, is to be taken into consideration.

The award of honours is based on the following mark boundaries. These are the same boundaries as used for the grade letters for reporting examination marks throughout the degree programme.

<table>
<thead>
<tr>
<th>Grade Letter</th>
<th>...corresponds to mark (%)</th>
<th>...corresponds to degree class</th>
<th>...corresponds to descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>85+</td>
<td>First class honours</td>
<td>Exceptional</td>
</tr>
<tr>
<td>A</td>
<td>70–84</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>60–69</td>
<td>Upper second class honours</td>
<td>Very Good</td>
</tr>
<tr>
<td>C</td>
<td>50–59</td>
<td>Lower second class honours</td>
<td>Good</td>
</tr>
<tr>
<td>D</td>
<td>40–49</td>
<td>Third class honours</td>
<td>Pass</td>
</tr>
<tr>
<td>E</td>
<td>below 40</td>
<td>Not up to honours level</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Final marks are not divulged to students by assessors or the Board of Examiners. The Registrar will release the marks confirmed at Board of Examiners to individual students in accordance with the procedures of Imperial College. Student marks will be held in an appropriate and secure Student Information System.

For candidates not in their final year, the Board of Examiners will make a decision on whether the candidate may progress to the next Part using the criteria set out later in this document. Again, mitigating circumstances, notified in advance, will be taken into account. It is possible, but not guaranteed, that a candidate who fails a Part can re-sit all the assessments in the following session. In the case of a marginal fail (i.e. with a grade in the range 30–39%) in one, or exceptionally two, modules, the examiners may set a Supplementary Qualifying Test (SQT) to allow the candidate to reach the pass mark and progress to the next part without delay. This course of action is not guaranteed and is only available where the performance in other assessments is very good.

About SQTs (Supplementary Qualifying Tests)
SQTs are generally carried out ‘in the same session’; which is to say before the start of the next academic year (around end August – beginning of September).

SQTs can take the form of examination or coursework. The decision on the exact form of the SQT will be taken by the module leader and will be designed to ensure that the module learning outcomes are achieved.

SQTs are capped at 40% in cases where a student has failed the module during the year. If a student subsequently fails the SQT, they will fail the year. An extraordinary Board of Examiners meeting will need to take place, where it will be decided whether the student will be offered an opportunity to retake the year.

Students may also be permitted to progress to the next academic year if they marginally fail one SQT.
with a grade in the range 30-39%, and where their overall aggregate mark for the year is at least 45%. An extraordinary Board of Examiners meeting will need to take place to determine whether the student will be permitted to bring forward the fail grade. This can ONLY be permitted after the SQT, not before.

If a student is taking an exam or assessment following the approval of mitigating circumstances, the 40% cap will not apply. Such assessments are administered on a first attempt basis. If such first attempts are failed, an extraordinary Board of Examiners meeting will need to take place, where it will be determined whether the student will be permitted to take an additional SQT capped at 40%. If the student subsequently fails such SQT, they will fail the year, and an extraordinary Board of Examiners meeting will need to take place to determine whether the student will be offered an opportunity to retake the year.

Failing to attend an SQT or first attempt resit without approved mitigating circumstances will result in a 0% grade, therefore a fail of the year.
Degree Part Weightings and ECTS - New Programme

The tables below summarise the weightings of marks from each part when combined into a total for the degree programme, and how ECTS are allocated to each part and each module.


**European Credit Transfer and Accumulation System**

<table>
<thead>
<tr>
<th>Weightings</th>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
<th>Part IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng</td>
<td>7.5%</td>
<td>35%</td>
<td>57.5%</td>
<td>-</td>
</tr>
<tr>
<td>MEng</td>
<td>7.5%</td>
<td>20%</td>
<td>72.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weightings</th>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
<th>Part IV</th>
<th>Total</th>
<th>Bologna Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td></td>
<td>180</td>
<td>Yes</td>
</tr>
<tr>
<td>MEng</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>90</td>
<td>270</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Year One (new programme)**

Students study all core modules. Year 1 modules are FHEQ Level 4

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Design Engineering – Term: 1</td>
<td>7.5</td>
<td>12.50%</td>
</tr>
<tr>
<td>Computing 1: Introduction to Scientific Computing – Term: 1</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Mathematics - Terms: 1, 2</td>
<td>10</td>
<td>16.67%</td>
</tr>
<tr>
<td>Materials &amp; Manufacturing (formerly known as ‘Production &amp; Materials) - Terms: 1, 2</td>
<td>10</td>
<td>16.67%</td>
</tr>
<tr>
<td>Human centred Design Engineering – Terms: 2, 3</td>
<td>12.5</td>
<td>20.84%</td>
</tr>
<tr>
<td>Computing 2: Applications – Terms: 3</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Solid Mechanics 1 - Term(s): 2</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Electronics 1: Introduction to Electronic Circuits, Sensors, and Mechatronics – Term: 3</td>
<td>5</td>
<td>8.33%</td>
</tr>
</tbody>
</table>

**Progression to Year Two**

- In order to progress to the next level of study, students must have passed all modules (equivalent to 60 ECTS years 1–3, 90 ECTS year 4) in the current level of study at first attempt, at resit or by a compensated pass.
- The pass mark for modules at levels 4, 5 and 6 is 40%, and at level 7 is 50%.
- Supplementary Qualifying Tests in up to two modules, may be offered to candidates whose performance is unsatisfactory.
## Year Two (new programme)
Students study all core modules. Year 2 modules are FHEQ Level 5

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
<th>% of part yrs. 3 &amp; 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Design Engineering (formerly known as ‘Design 2’) - Term: 1</td>
<td>7.5</td>
<td>12.50%</td>
<td></td>
</tr>
<tr>
<td>Gizmo: Physical Computing - Terms: 1, 2</td>
<td>10</td>
<td>16.67%</td>
<td></td>
</tr>
<tr>
<td>Solid Mechanics 2 (formerly known as ‘Mechanics for Design Engineers (M4DE)’) - Term: 1</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Electronics 2: Signals, Systems, and Control - Term: 1</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Finite Element Analysis (formerly known as ‘Computer Aided Engineering’) - Term: 2</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Thermofluids (formerly known as ‘Energy &amp; Design’) - Term: 2</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Industrial Design Engineering (formerly known as ‘Engineering Design Project’) - Terms: 2, 3</td>
<td>12.5</td>
<td>20.85%</td>
<td></td>
</tr>
<tr>
<td>Data Science (formerly known as ‘Big Data’) - Term: 3</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td>Working in Organisations - Term: 3</td>
<td>5</td>
<td>8.33%</td>
<td></td>
</tr>
</tbody>
</table>

### Progression to Year Three
- In order to progress to the next level of study, students must have passed all modules (equivalent to 60 ECTS years 1–3, 90 ECTS year 4) in the current level of study at first attempt, at resit or by a compensated pass.
- The pass mark for modules at levels 4, 5 and 6 is 40%, and at level 7 is 50%.
- Supplementary Qualifying Tests in up to two modules, may be offered to candidates whose performance is unsatisfactory.

## Year Three (new programme)
Students study all core modules and a compulsory I-Explore module (see section 10.1). With the advice and approval of their Personal Tutor, they then determine one module selection from the Group A set of Electives. Year 3 modules are FHEQ Level 6

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part yr. 3</th>
<th>% of part yrs. 3 &amp; 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Engineering Futures (formerly known as ‘Group Project’) - Terms: 1, 2</td>
<td>15</td>
<td>37.5%</td>
<td>13.62%</td>
</tr>
<tr>
<td>Robotics 1: Intro to Robotics - Terms: 1</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Robotics 1: Applied Robotics - Terms 2</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Optimisation - Term: 1</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Innovation &amp; Entrepreneurship - Term: 1</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Year 3 Elective, Group A - Term: 2</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Selected menu of other Electives from Faculty / College - Term: 2</td>
<td>5</td>
<td>12.5%</td>
<td>4.55%</td>
</tr>
<tr>
<td>I-Explore module (see section 10.1 above) - Terms: 1 and / or 2</td>
<td>5</td>
<td>0% (pass / fail)</td>
<td>0%</td>
</tr>
<tr>
<td>Industry Placement (Part 1) - Term: 3</td>
<td>15</td>
<td>0% (pass / fail)</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Progression to Year Four
- In order to progress to the next level of study, students must have passed all modules (equivalent to 60 ECTS years 1–3, 90 ECTS year 4) in the current level of study at first attempt, at resit or by a compensated pass.
- The pass mark for modules at levels 4, 5 and 6 is 40%, and at level 7 is 50%.
- The overall weighted average for each of the first three years must be at least 40%, including where a module(s) has been compensated, in order to progress to the next year of the programme.
- Supplementary Qualifying Tests in up to two modules, may be offered to candidates whose performance is unsatisfactory.
Year Four (new programme)

Students study all core modules. With the advice and approval of their Personal Tutor, they then determine two module selections from the Group A set of Electives and two additional modules from the Group B set.

Year 4 modules are FHEQ Level 7 (note that Group A electives are at FHEQ Level 6).

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part Year 4</th>
<th>% of part Years 3+4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Placement (Part 2) - Term: Summer</td>
<td>25*</td>
<td>7.14%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Master’s Project - Terms: 1, 2, 3</td>
<td>30</td>
<td>42.87%</td>
<td>27.27%</td>
</tr>
<tr>
<td>Enterprise Roll Out - Terms: 1, 2</td>
<td>15</td>
<td>21.43%</td>
<td>13.62%</td>
</tr>
<tr>
<td>Year 4 Elective #1, selected from Group B modules - Term: 1</td>
<td>5</td>
<td>7.14%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Year 4 Elective #2, selected from Group B modules - Term: 1</td>
<td>5</td>
<td>7.14%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Year 4 Elective #3, Selected from Group A modules offered by the School or selected modules from other Imperial departments - Term: 2</td>
<td>5</td>
<td>7.14%</td>
<td>4.55%</td>
</tr>
<tr>
<td>Year 4 Elective #4, Selected from Group A modules offered by the School or selected modules from other Imperial departments - Term: 2</td>
<td>5</td>
<td>7.14%</td>
<td>4.55%</td>
</tr>
</tbody>
</table>

Successful Completion Criteria

• 20 ECTS credits of Industry Placement (Part 2) are assessed on a pass / fail basis. The other 5 ECTS are numerically assessed.
• Students must have passed all modules (equivalent to 60 ECTS years 1-3, 90 ECTS year 4) in the current level of study at first attempt, at resit or by a compensated pass.
• As an accredited degree, students on the MEng programme are subject to the standards set by the Engineering Council in relation to compensation: a maximum of 15 ECTS credits can be compensated across the entire programme.
• The pass mark for modules at levels 4, 5 and 6 is 40%, and at level 7 is 50%
• The overall weighted average for each of the first three years must be at least 40%, including where a module(s) has been compensated, in order to progress to the next year of the programme.
• In order to successfully complete the degree, the average for Year 4 modules must be at least 50%, including where a module(s) has been compensated.
• Supplementary Qualifying Tests are not available in the final year.
Degree Part Weightings and ECTS - Blended Programme

The tables below summarise the weightings of marks from each part when combined into a total for the degree programme, and how ECTS are allocated to each part and each module.

MEng in Design Engineering, Blended programme
(2017/18, 2018/19 entry cohorts – AY2021/22 DE4)

European Credit Transfer and Accumulation System

<table>
<thead>
<tr>
<th>Weightings</th>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
<th>Part IV</th>
<th>Total</th>
<th>Bologna Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>180</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>MEng</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>90</td>
<td>270</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Year One (blended programme)
Every student must take all modules

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Mathematics - Terms: 1, 2</td>
<td>7.5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Communication in Design - Terms: 1, 2</td>
<td>10</td>
<td>16.67%</td>
</tr>
<tr>
<td>Production and Materials - Terms: 1, 2</td>
<td>10</td>
<td>16.67%</td>
</tr>
<tr>
<td>Design 1 - Terms: 1, 2, 3</td>
<td>12.5</td>
<td>20.83%</td>
</tr>
<tr>
<td>Engineering Analysis 1.1 – Mechanics – Term: 1</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Analysis 1.2 – Energy and Design – Term: 2</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Analysis 1.3 – Electronics – Term: 3</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Computing 1 – Term: 3</td>
<td>5</td>
<td>8.33%</td>
</tr>
</tbody>
</table>

Progression to Year Two
- The pass mark for each module is 40%. All modules must be passed in order to progress.
- Supplementary Qualifying Tests in up to two modules, may be offered to candidates whose performance is unsatisfactory
Year Two (blended programme)
Every student must take all modules

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gizmo (Physical Computing) - Term: 1, 2</td>
<td>12.5</td>
<td>20.83%</td>
</tr>
<tr>
<td>Engineering Analysis 2.1 - Mechanics for Design Engineers - Term: 1</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Analysis 2.2 - Computer Aided Engineering - Term: 2</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Analysis 2.3 - Computer Aided Engineering - Term: 2</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Design 2 - Term: 1, 2</td>
<td>7.5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Computing 2 - Term: 1</td>
<td>7.5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Big Data - Term: 3</td>
<td>5</td>
<td>8.33%</td>
</tr>
<tr>
<td>Engineering Design Project - Terms: 1, 2</td>
<td>12.5</td>
<td>20.83%</td>
</tr>
</tbody>
</table>

**Progression to Year Three**
- The pass mark for each module is 40%. All modules must be passed in order to progress.
- Supplementary Qualifying Tests in one module may be offered to candidates whose performance is unsatisfactory.

Year Three (blended programme)
Every student must take two elective modules, and all non-elective modules. Industrial Placements commence in April

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation and Entrepreneurship - Term: 1</td>
<td>5</td>
<td>11.11%</td>
</tr>
<tr>
<td>Optimisation - Term: 1</td>
<td>5</td>
<td>11.11%</td>
</tr>
<tr>
<td>Robotics - Terms: 1, 2</td>
<td>10</td>
<td>22.22%</td>
</tr>
<tr>
<td>Design Engineering Futures - Terms: 1, 2</td>
<td>15</td>
<td>33.34%</td>
</tr>
<tr>
<td>Year 3 Elective 1 - Term: 2</td>
<td>5</td>
<td>11.11%</td>
</tr>
<tr>
<td>Year 3 Elective 2 - Term: 2</td>
<td>5</td>
<td>11.11%</td>
</tr>
<tr>
<td>Industry Placement (Part 1) - Term: 3</td>
<td>15</td>
<td>0% (Pass/Fail)</td>
</tr>
</tbody>
</table>

**Progression to Year Four**
- The pass mark for each numerically assessed module is 40%.
- All modules must be passed in order to progress.
- Supplementary Qualifying Tests in one module may be offered to candidates whose performance is unsatisfactory.
- A student who has obtained 180 ECTS credits may, at the discretion of the Examiners, be permitted to graduate with the award of a BEng degree.
### Year Four (blended programme)

Every student must take two elective modules, and all non-elective modules.

<table>
<thead>
<tr>
<th>Modules</th>
<th>ECTS</th>
<th>% of part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Placement (Part 2) – Terms: summer</td>
<td>25*</td>
<td>7.14%</td>
</tr>
<tr>
<td>Master’s Project <em>(formerly known as ‘Solo Project’)</em> – Terms: 1, 2, 3</td>
<td>30</td>
<td>42.87%</td>
</tr>
<tr>
<td>Enterprise Roll Out – Terms: 1, 2, 3</td>
<td>15</td>
<td>21.43%</td>
</tr>
<tr>
<td>Year 4 Elective 1, (from group B) – Term: 1</td>
<td>5</td>
<td>7.14%</td>
</tr>
<tr>
<td>Year 4 Elective 2, (from group B) – Term: 1</td>
<td>5</td>
<td>7.14%</td>
</tr>
<tr>
<td>Year 4 Elective 1, (from group A) – Term: 2</td>
<td>5</td>
<td>7.14%</td>
</tr>
<tr>
<td>Year 4 Elective 2, (from group A) – Term: 2</td>
<td>5</td>
<td>7.14%</td>
</tr>
</tbody>
</table>

#### Successful Completion Criteria
- *20 ECTS credits of Industry Placement (Part 2) are assessed on a pass / fail basis. The other 5 ECTS are numerically assessed.
- The pass mark for each module is 40%. All modules must be passed in order to be awarded the MEng.
- Supplementary Qualifying Tests are not available in the final year.
Other Exit Routes

<table>
<thead>
<tr>
<th>Award</th>
<th>Length of Study</th>
<th>Mode of Study</th>
<th>Available to (curriculum type)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng (Hons)</td>
<td>3 calendar years</td>
<td>Full-time</td>
<td>All</td>
<td>ECTS 180 CATS 360</td>
</tr>
<tr>
<td>DipHE</td>
<td>2 calendar years</td>
<td>Full-time</td>
<td>New programme only*</td>
<td>ECTS 120 CATS 240</td>
</tr>
<tr>
<td>CertHE</td>
<td>1 calendar year</td>
<td>Full-time</td>
<td>New programme only*</td>
<td>ECTS 60  CATS 120</td>
</tr>
</tbody>
</table>

* please see section 10: DE Year by Year (particularly 10.3), and appendix D and E for definitions and details on ‘blended’ and ‘new programme’.

In order to provide a route for students that are unable to complete the MEng programme, we have defined exit routes following the end of each intermediate year. These are routes we provide for convenience where in lieu of these options, the alternative would be for students to depart the programme with no qualifications where years have been successfully completed by students.

We wish to stress the following important points:
• These are not routes we promote or recommend and it is not possible for students to directly enrol onto them;
• These routes are exit awards only; they are not accredited and do not satisfy the requirements for chartered status;
• These exit awards may be offered to students, in exceptional circumstances, at the discretion of the Board of Examiners.

Students considering these exit routes should liaise with the programme for more details on next steps. Generally it is recommended a discussion be had with the following, in this order:
• Your Personal Tutor;
• The Senior Tutor or Deputy Senior Tutor;
• The DUGS.

The Teaching Office are also able to offer students general advice.

**IMPORTANT**
These alternative exit routes do not, on their own, satisfy requirements for chartered status and we are not seeking accreditation for these awards. They are also not automatic – students interested should engage with programme staff as noted above for consideration and details on next steps.
Appendix F– Roles and responsibilities of Wellbeing Reps

**Department Reps (Wellbeing)**

**Summary of role**

Department Representatives (Wellbeing) are elected members who are responsible liaising with College staff regarding issues raised by Year Reps (Wellbeing). They are expected to support campaigns, Liberation Officers and raise awareness on campus about wellbeing issues affecting students. The wellbeing reps should never act as counsellors, caregivers, advisers or a peer support network, however, they are expected to be able to signpost students to those with adequate training to do so.

<table>
<thead>
<tr>
<th>Relationships with: CU Welfare Officers, Year Reps (Wellbeing), Liberation Officers, Academic Reps, Education &amp; Welfare team, Advice Centre, Director of Student Services, Student Support Services, Departmental Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible for: Year Reps (Wellbeing)</td>
</tr>
<tr>
<td>Responsible to: Deputy President (Welfare), CU Welfare Officers</td>
</tr>
</tbody>
</table>

**Key responsibilities and duties**

- Ensure they are known to the Year Reps (Wellbeing) and students in their cohort, ensuring students’ views are represented within meetings and that they are kept up to date with any changes and developments
- Meet with Year Reps (Wellbeing) to collate feedback from students in the department
- Attend and submit items for discussion to Staff-Student Committees, Community and Welfare Board and other meetings deemed necessary
- Help to inform CU Welfare Officers, Deputy President (Welfare) and Liberation Officers of issues identified
- Refer urgent issues directly to a relevant member of College or Union staff, especially if you are concerned about a student’s safety
- Ensure student confidentiality is maintained at all times unless agreed otherwise or you believe the student to be a danger to themselves or others
- Make it clear to students that you cannot provide counselling, support or advice, however you can signpost to relevant services
- Be in regular communication with the Wellbeing and Campaigns Coordinator

**Skills and knowledge required**

- Thorough knowledge of the Wellbeing Representation structure and awareness of the Academic Representation structure
- Good understanding of College’s workings as a whole and knowledge of available support services both internally and externally
- Attend relevant training courses as required in order to fulfil the role
• Have an understanding of the Union and its structures
• Know who to contact in emergencies and if you have concerns regarding a student’s safety
• Being aware of and adhering to personal limitations and limitations of the role, seeking support for oneself regarding pressures of the role from Union staff

Training and support

• Wellbeing Rep Induction
• Introductory mingle with Union Reps
• Ongoing support from the Wellbeing and Campaigns Coordinator
• Imperial Plus workshops
• Mental Health First Aid training

Time commitment and availability

• Department Reps (Wellbeing) should expect to attend at least two formal meetings a term with College staff. These are usually held at campus where the bulk of the course is administered so should require no more travel than expected on a day to day basis. Meetings typically last one to two hours
• Students would be expected to catch-up with Year Reps (Wellbeing) in advance of formal meetings to establish what point for discussion are being raised by students. This can be informal and last about an hour
• Representatives should be available by email and expect to be approached to meet for a short time with students when requested. Email correspondence should be answered within a reasonable time frame
• Work relating to the position should take on average no more than a few hours a week. The work volume will vary during the course of the academic year and term by term. Meetings and work commitments during examinations will be avoided where possible

It is recognised that students are first and foremost at Imperial to study or research and that this must be prioritised. Students who feel their studies are being compromised, are struggling or feel they are spending too much time filling the role should speak to the Wellbeing and Campaigns Coordinator (laura.regan@imperial.ac.uk)
Department Reps (Wellbeing)

Summary of role

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- Ensure they are known to the Year Reps (Wellbeing) and students in their cohort, ensuring students’ views are represented within meetings and that they are kept up to date with any changes and developments
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Appendix G(a) - Advice on Laptop Purchases
(from the School)

Autumn 2021
We are looking forward to welcoming you as one of our new students in October. We have lived with COVID-19 for over 18 months now and the situation appears to be improving. In spite of that, we still have to take precautions to ensure everybody’s safety on campus. We are doing everything we can to make sure that you will be able to achieve all learning outcomes no matter what restrictions the government may impose on us. Currently our plan in the return to campus with in-person teaching where possible and beneficial.

One of the common questions that new students ask is: “What Laptop computer should I buy that will support my study at Imperial College?” The following provides the necessary information you need to make that decision. There is also a new section here addressing the COVID related issues for this very special year.

Do I need to have my own laptop?
The short answer is “YES”. We require all our students to have their own personal laptop computer. Your laptop will become part of your everyday tools, just like pen and paper. By the end of the course, we want you to become proficient in managing your own laptop, including all the software installed on it. You will find such transferable skills invaluable for your future.

What are the most important criteria in choosing my personal laptop?
Unlike what many people think, the speed/performance of your laptop is probably of least importance. You will only need a very fast computer on rare occasions, and you can make use of College machines for this purpose. Instead you find two factors make your laptop most useful:

a) **Weight** – you will be carrying your laptop in your bag most of the time. So, choosing a light-weight laptop is crucial. There is a reduced risk of you hurting your back.

b) **Battery endurance** – your laptop battery lasting for the entire day at College is another important factor. It saves you having to carry the charger with you.

Shall I choose a PC or a Mac?
Your personal laptop should run Microsoft Windows or Apple MacOS. We do not recommend you to run Linux because many software packages are not compatible on it. All application software used on the course will run on Windows 10, and most of them also have a version that runs on MacOS. If you choose a PC, then obviously, you will be running Windows. If you choose a Mac, then our recommendation is to run both MacOS and Windows 10 on your laptop. You can always run a virtual machine, which allows you to run multiple operating systems on a single laptop. If you use a Macbook, we recommend you run Virtual Box, a free virtual machine software that you can download and install.

Are there laptops available in the School?
The Department has a number of laptops that you may borrow for a 4-hour loan session. These laptops are stored in secure lockers that you operate yourself using your Imperial College ID card. Borrowing a laptop is like borrowing a library book. If you do not return it within the due period, an overdue fine may be incurred. (See later on COVID related issues).

Is there a laptop model that you would recommend?
The College generally does not make official recommendations on specific make of laptops. However, it is worth noting that the following models are used as the loan laptops in our Level 2 Studio:

Apple – MacBook Pro 13”, 16GB of RAM, 256GB SSD drive, no Touch Bar (Qty: 16)
PC – HP EliteBook 840 G5 15”, 16GB of RAM, 512GB SSD drive (Qty: 20)

Your personal laptop should have at least 8GB of RAM and 512GB of disk storage. We strongly recommend you purchase one that uses Solid-State Disk (SSD) because the read and write speeds are superlative and the lack of moving parts generally makes for greater reliability.

What capacity of SSD do you recommend?
Although your SSD drive should not be smaller than 256GB, we recommend you consider purchasing one that is between 512GB to 1TB. Otherwise, you may need to offload your photos, videos and music to a backup hard drive often.
What about software; will the College provide these for us?
Generally, we will provide access to any software that is a requirement for the course. The College has agreements with many software vendors such that students could install some programs for free on their personal machine. For example, the School currently provide all MEng students an annual Adobe Creative Cloud license. Details will be provided by your module leader at the start of the term.

Should I choose a laptop with an i7 or M1 processor?
For the degree programme, you will very rarely need an ultra-powerful processor. Therefore, in choosing the specification of your laptop, processing power is the least important factor. You should prioritise the weight (light) and battery life (long), and possibly the amount of RAM you have in the laptop. There is no reason for you to choose a quad-core i7, which will consume more power and you will run out of battery quicker. A humble i5 is generally sufficient. For Macbooks, M1 processor models would be wise choice.

Apple Mac is almost twice the price of a PC. Is it worth it?
There is no right or wrong answer to this question – it depends on your budget and the trade-offs that you are willing to make. Here are some reasons Mac users can cite to justify the high cost. MacBooks tend to be early adopters of the latest screen, connectivity (e.g. Thunderbolt), interface (e.g. TouchBar) and security technologies (e.g. fingerprint / facial recognition). They are also machined from solid blocks of aluminium, elegantly doubling up as heat sinks. The related research and development + manufacture is inherently expensive. Philosophically, they adopt an ‘ecosystem’ approach such that those owning a range of Apple products can experience tightly integrated ‘handoff’ across those devices – for many this is a significant boost to workflow and productivity. This can extend across users, e.g. Apple users can ‘Air Drop’ files to Apple device using colleagues nearby, without resorting to email or the cloud. There is a commonly held belief that the component parts in Macs (display, camera, mic, data buses, graphics card, processor, RAM etc.) are specced and optimised to work harmoniously together.

In contrast PC manufacturers can tend to go for an ‘off the shelf’ approach that can lead to small instabilities as the component parts of the computer ‘talk’ to each other. In terms of manufacturing however, this can lead to huge economies of scale and these savings can be passed on to achieve excellent performance for a knockout price. Modern machines are generally reliable and secure regardless of platform. For most the choice is a personal one, depending on budget as well as preference in workflow (which operating system resonates with you the most).

Do I need a desktop as well as a laptop?
No, instead for better ergonomics when at home, you may wish to invest in an external monitor, keyboard and mouse, maybe a docking station too for better connectivity, ethernet etc. This configuration affords the greatest flexibility.

When should I buy my laptop?
That’s up to you. Buying your own laptop before you start will give you time to get used to your laptop during the summer vacation. However, if you wait until you start with us before you buy your own personal machines, you may be able to purchase the laptop as an Imperial registered student on discount.

If I am on a limited budget and cannot afford my personal laptop, what can I do?
If you, for whatever reason, are unable to buy your own laptop, please discuss your case with Professor Peter Cheung at the start of the programme.

Do I need a printer or other computer peripherals?
The College operates server based printing (print and collect from any nearby College student facing printer). Printing is charged on a per-page basis. If you intend to print lots of paper copies, it may prove more cost effective to use your own printer. However, we encourage our students to minimize printing and use online documents where possible. All coursework is submitted online in electronic form.

You may also find it worthwhile procuring USB C to A adaptors (if necessary), USB memory sticks, a separate keyboard and mouse, an external hard disk (at least 1TB), and a hub.

Do I need a tablet as well as a PC?
Some students have found owning a tablet and a stylus (e.g. Apple Pencil) helpful, particularly when making electronic notes. Others even bought a PC that can be turned into a tablet (e.g. MS Surface). The decision is yours. Nevertheless, you definitely would need a laptop, but not a tablet.

Do I need to subscribe to cloud-based storage?
You do not need to pay for your own cloud storage (e.g. iCloud, Google Drive or Dropbox). Imperial College provides each student with secure file space. In addition, each student can also use up to 5TB of cloud-based personal file
storage via Microsoft’s OneDrive for Business for syncing their local disk for offline work, and for backup. See: https://www.imperial.ac.uk/admin-services/ict/self-service/connect-communicate/office-365/features/onedrive-for-business/.

**Should I purchase Adobe Creative Cloud for the course?**
Adobe Creative Cloud (Adobe CC) is a suite of creative software that used in almost all our design-related modules. In the past, we only guaranteed student’s access to the software, which could be through the department loan laptops. Due to COVID-19 and our mixed-mode teaching, we will be providing all our MEng students with their personal Adobe Creative Cloud CC license valid from 12 October 2021 for one year. In short, please do not purchase or subscribe any software for the degree programme; we will provide these.

**If I need more information, who should I contact?**
Contact Professor Peter Cheung on p.cheung@imperial.ac.uk with any questions or for advice relating to your personal laptop requirements.
Appendix G(b) - Advice on Laptop Purchases
(from College ICT. See 7.3 ‘College ICT Support’ for more details on ICT)

Student Devices – Minimum Specification Guidance
We are looking forward to welcoming you as one of our new students in October. One of the common questions that new students ask is: “What Laptop computer should I buy that will support my study at Imperial College?” This document provides the necessary information to guide you in make that decision. It is strongly recommended that you have access to a laptop as part of your studies as this will enable you to access the required course material, submit work and join with remote/digitally based teaching sessions. From a Health and Safety perspective, bringing your own laptop to campus will enable you to avoid having to use physical machines that may have been used by other prior to you – cleaning on campus has been significantly increased but this is an extra benefit to using your own device.

Specification & Considerations:

Practical considerations
The main consideration for students should be mainly based around the following:

• Weight – as you will often be carrying these devices this needs to be a key consideration when choosing device.
• Battery – having a device that could last a full day when on campus would save having to carry a charger as well or needing to be in a location when power access is required

PC vs Mac
The College does not specify one or the other for use on courses. All applications used for course delivery are Windows 10 compatible and the majority of these also have a version that runs on Apple’s OS X operating system. If you do decide to choose an Apple device, we would recommend that you have it configured to run both OS X and Windows 10 (potential by using a virtual machine which would allow for both to be run concurrently).

Laptop Specification
The laptop you choose to buy should, ideally, not be below the following specification:

• i5 processor (or equivalent)
• 8Gb Memory
• 256Gb SSD Hard disk

NOTE: Some courses may require more processing power such as increased memory or a higher spec processor but one aspect to be considered is that an i7 processor will require more power so may impact battery life and be higher in cost. It may only be useful for cases where students will be required to undertake high intensity processing on their local device.

Storage (Hard disk & Cloud storage)
College strongly recommends that devices purchased should have a Solid-State disk (SSD) as these perform better and are more reliable in the long run.

You do not need to pay for your own storage as you will be provided with 5Tb of OneDrive for Business storage as part of license you will have by being at the College.

Additional Functionality
Webcam:
Most modern laptops will now include an in-built webcam. These will work with most common applications that can run on the device.

If a separate webcam is required, these should be USB based (incl. USB-C if required) as these will have the most common driver sets

Microphone/headset:
Most modern laptops will have an inbuilt microphone and speakers that will provide a basic level of audio quality. You should consider getting a headset to provide a better quality of audio for taking part in remote meetings/sessions – this will enhance the experience for yourself and others.
Most headsets will now connect via USB or Bluetooth. You should test the experience of using branded ear-bud based Bluetooth devices with laptops of a different brand (i.e. Apple AirPods with a Windows laptop) as some audio issues can occur. A more device agnostic headset would probably provide a more consistent experience.

Writing/Stylus input:
There are quite a few devices on the market now which provide stylus-based inputs such as 2-in-1 devices (e.g. Microsoft Surface Pro range). These may be slightly more expensive than traditional laptops but would negate the need for additional peripherals (if required on the course).


Tablets such as more modern iPads and Samsung Tablets could be used for this as well, but this may result in students requiring a secondary device as well.

Peripheral graphics tablet devices should use a common input method (such as USB) as these will most likely have the most commonly updated driver sets.

ICT Support for Student owned Devices
ICT will always do its utmost to provide support to students, their devices and peripherals. However, this is on a best endeavours approach with no guarantees in place. If you are studying remotely or where social distancing prohibits it, ICT's ability to support you may be hindered by not being able to physically access the device to undertake checks/inspections, but they will endeavour to help where possible.
Appendix H - School Laptop Loan Scheme

General usability
Some of the items listed in this document are subject to improvement plans but certain infrastructure improvements need to be made first.

The machine is protected by Deep Freeze which resets the laptop on restart (reboot).

Login
The username for each laptop has been set to DysonUser and the password will be provided to students by Academic staff. The passwords are set to DyImpLoan-xxx where ‘xxx’ represents the machine number on the login screen, so 003 would be DyImpLoan-003.

‘DysonUser’ is a LOCAL account and has no network connectivity in itself. To login, enter the username in the following format:
\DysonUser

Note that the . and the \ are important here, as are the capital D and U. The password is then as stated.

Initial Login Behaviour
Some items will start up once you login, but won’t function until you connect to WiFi (noted below). Chrome will launch and try and load Software Hub, as will Creative Cloud.

Wi-Fi
Once you are logged in, you will need to connect to Wi-Fi by selecting the Wireless icon in the bottom right hand corner next to the clock.

You will then be presented with a list of Wireless Connections to attach to. From here connect to the network named Imperial-WPA. There are a couple of Certificate prompts, one just after you click connect on Imperial-WPA and one after enter your credentials; ensure you accept both. You need to login to Wi-Fi using your College user name and password. Once complete, the Wi-Fi icon will turn white and Imperial-WPA will show as connected.

Note: Until you login, no services will be accessible. You can login in via V1.0 1 Oct 2018 or another network when offsite to access the software.

Accessing Network Services
Once you have connected to Wi-Fi, you will be able to connect to all network services that were loaded upon you logging in. To access the software available to the laptop, refresh the Chrome browser window and login to the Software Hub when requested using your College credentials. If you closed Chrome accidentally, click on the Software Hub icon on the computer’s desktop (see image below) or navigate to https://softwarehub.imperial.ac.uk using the Chrome browser.

Once logged in you will see it validate against your laptop; this should take moments and should then show a green bar stating that validation has been successful (see image below). If it fails the bar will be red.

You will then be able to launch the software available for you to use.

Software Hub
By default, users will be able to see a large number of applications that they can use on the laptop. This list may appear quite daunting at first but there are a couple of options you can use. Firstly, you can search for the application you need by using the ‘Search Apps’ windows at the top right of the Software Hub:

Once you find the application you want, and you know you will use it again, you can favourite it by clicking on the star at the top of the icon, you can find this by hovering over the icon. Note this may take a second to turn the star yellow, please be patient; if you click it again, you will unfavourite the application!
If you find an application that isn’t available or isn’t performing as well as you expect, let us know and we’ll sort it.

**Local Installs and Software Hub applications**

There is currently a mix of applications that have been installed on the laptops in the “traditional way” and those that are “streamed” from the Software Hub. There are benefits to each and some disadvantages. Applications like MatLab, MS Office and Adobe Creative Cloud have been installed on the machine as they are either too big, complex or the license doesn’t support streaming; the remainder of the applications available to DE students are streamed.

**What is the difference and what will I notice?**

Traditional applications install all their files onto the machine and has been an effective way of working for a very long time. However, managing these applications on a day to day basis becomes tricky. For example, if an update is required, each install needs to be patched individually.

Streaming an application is beneficial for students who want to access software (license permitting) outside of the College environment. Visiting https://softwarehub.imperial.ac.uk from your personal machine gives access to certain applications.

Streaming an application is more efficient as firstly, it only uses the files it requires but also when it comes to updating the application, we update once centrally and then subsequent launches of the application use the newly updated package. It also means we can quickly respond to change requests and deliver software required for teaching within a shorter space of time.

Applications from the Software Hub may be slower to load on a first run but will be quicker on-going once they are cached (i.e. stored on the local disk); they should function as normal once cached. Some larger applications may take a little longer to load so please be patient.

Note that there is some work we can do to enhance the performance of the applications but it would require input from Colleagues / Students who use the application on a daily basis.

**Launching Applications**

Both streamed applications and those that are locally installed will be presented via the Software Hub. You can tell the difference by hovering your mouse pointer over the icon.

<table>
<thead>
<tr>
<th>Locally installed application</th>
<th>Streamed application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keystom via locally Deployed (Win)</td>
<td>Arduino IDE 1.8.5 via Cloudpacing</td>
</tr>
</tbody>
</table>

Doing this all via the Software Hub should give a consistent way of accessing applications both on and off campus.

**Maintenance**

The laptops are configured to wake up from sleep or a shutdown state at 0:01 every morning. They will enter a maintenance state until 6am and then shutdown again. During this period, they should receive any updates to software and the operating system that ICT delivers. Please ensure that the laptops are returned to the locker with power and network attached, in a shutdown state with the lid closed.

**Troubleshooting**

When logging in to the Software Hub, you may see a message pop up in place of the green validated bar stating that validation was not successful. In this case, please close the browser and try again.

**Application prompts**

Microsoft Word pops up with a couple of prompts which ICT are unable to suppress due to the way in which Microsoft configures its policy settings. The first is allows the installation of Spellex for Word, click install to proceed.

The following 2 are accepting the license in Word and choosing the document standard that you wish to use. Both will still save as docx but the underlying language changes depending on the choice you make. ICT’s recommendation is Office Open XML formats as this supports all features within Microsoft Office.
Future Development

Single Sign-on
The initial design has a single sign on configuration applied so that when a user logs into the Windows login dialogue, it automatically passes through credentials for usage of Microsoft OneDrive and the Software Hub. It also maps the H drive for use.

The pass-through component isn’t 100% reliable so has been disabled for the time being whilst ICT works to resolve this issue. ICT will shortly be providing a network login script that will allow users to connect to their H drive once connected to the WiFi network.

Mac Dual Boot
The Macs have been configured to dual boot with both Windows 10 and MacOS on them. ICT is working to manage this configuration to ensure that both the Mac and Windows builds receive the maintenance they need. This will be applied to the Mac devices later on.
Appendix I - Question set from the School Mitigating Circumstances Survey, for reference

Question set from the School Mitigating Circumstances survey for your reference: https://imperial.eu.qualtrics.com/jfe/form/SV_bdYYXHq4bmkM2Sp, in case students wish to draft responses outside of the form, and copy paste.

Design Engineering Extension Request and Mitigating Circumstances Request Form

Design Engineering students should use this form to claim mitigating circumstances for one or more assessments (as appropriate). The School procedure on this can be found in the student handbook (see link below). It is adopted from the College guidance on this: https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/mitigating-circumstances/Final-Mitigating-Circumstances-Policy-v1.1-October-19.pdf.

SCHEDULE AND LAST SUBMISSIONS:
Extension requests are looked at separately and we aim for a three day turnaround. For all other matters, the School panel, known by the acronym MCAP (mitigating circumstances advisory panel) meet in accordance with the following schedule:
• Week 2 of Term 1: week beginning 11 October 2021;
• Week 7 of Term 1: week beginning 15 November 2021;
• Week 2 of Term 2: week beginning 17 January 2022;
• Week 7 of Term 2: week beginning 21 February 2022;
• Week 2 of Term 3: week beginning 09 May 2022;
• Last week of June (which is approximately one week before the Exam Board meeting).

The panel will seek to review each mitigating circumstances request that is received by the Friday of the week before that noted above. Requests received after that point shall be tabled for the next scheduled meeting as above.

YOUR PRIVACY:
Who sees your submission?
Completed forms are in the first instance restricted to two members of the Dyson Teaching Office. Those Members of the Teaching Office will make your responses available to the School’s Mitigation Advisory Panel (see the student handbook for membership details). The aforementioned will treat this information in the strictest confidence. For more details please contact us on desenior.tutor@imperial.ac.uk.

If your circumstances are especially sensitive in nature:
If the circumstances towards your request are highly personal and/or sensitive in nature, you are welcome to use this form to lodge the request, then share your supporting documentation separately via means you feel most comfortable with. In such circumstances you can also forego this form entirely and submit your claim via alternative means; please contact your Personal Tutor and/or the School Senior Tutor or Deputy Senior Tutor or members of the Teaching Office Team for details (see the student handbook for staff contact details). You can request they get in touch with you via the following email address: desenior.tutor@imperial.ac.uk.

Tip: you may wish to see the questions posed in this form as appended at the end of the student handbook then draft your responses elsewhere and paste here (this form won’t time out, in fact it should save and allow you to continue later. You might just find writing your responses out then pasting here easier).

PLEASE SELECT THE KIND OF REQUEST YOU WISH TO MAKE
- extension request for coursework
- other mitigating circumstances

EXTENSION REQUEST 1:
Please select the module from the list below: drop down list

Coursework component: free text field
Type of coursework
- Individual
- Group work (please note, this option requires students to first liaise with the Module Leader on possible solutions. If you have not done that yet, please do so. If you have and the Module Leader was unable to resolve the matter, please proceed with this form)

Group work request: does this request have the support of all affected students in the group? (By answering yes, you grant us permission to confirm this with group members, if necessary) Y/N

Coursework submission deadline: date picker

Please describe the reason/s for your extension request:
x3 free text fields under the following headings:
- What happened (the circumstances)
- How this impacted on you
- When this affected you

EXTENSION REQUEST 1: REQUEST IN RELATION TO THE DEADLINE
Please select one of the following:
- This request is within ten working days of the assessment deadline
- This request falls outside ten working days of the assessment deadline (if option selected, the below question appears):

EXTENSION REQUEST 1: CLAIM RECEIVED AFTER TEN WORKING DAYS
Please explain below the reasons you were unable to make your claim within ten working days of the assessment deadline - free text field

Option to submit up to a further two additional extension requests in the same response. Then prompt to upload supporting documentation section of form.

******************************************************************************

MITIGATING CIRCUMSTANCES REQUEST (non extension request)
Are you claiming for the entire academic year? N/Y

MITIGATING CIRCUMSTANCES REQUEST 1:
Please select the module from the list below: drop down list

Assessment: free text field

Date of assessment or coursework deadline: date picker

MITIGATING CIRCUMSTANCES REQUEST 1: REASON FOR CLAIM
x3 free text fields under the following headings:
- What happened (the circumstances)
- How this impacted on you
- When this affected you

MITIGATING CIRCUMSTANCES REQUEST 1: Indicate whether you sat / submitted the assessment - Y/N/other (with free text field)

MITIGATING CIRCUMSTANCES REQUEST 1: REQUEST IN RELATION TO THE DEADLINE
Please select one of the following:
- This request is within ten working days following the assessment deadline
- This request is later than ten working days following the assessment deadline – if picked the following question appears:

MITIGATING CIRCUMSTANCES REQUEST 1: CLAIM RECEIVED AFTER TEN WORKING DAYS
Please explain below the reasons you were unable to make your claim within ten working days following the assessment deadline - free text field
Option to submit up to a further two additional mitigating circumstances requests in the same response. Then prompt to upload supporting documentation section of form.

MITIGATING CIRCUMSTANCES SUPPORTING DOCUMENTATION
- I am self certifying
- I have document/s to upload
- My supporting documents aren’t available yet

where selected above SELF CERTIFYING
This only applies where independent evidence supporting your request cannot be provided. Please outline your reasons for absence / sickness: - free text field

SUPPORTING DOCUMENTATION UPLOAD
IMPORTANT NOTES
If you are making multiple requests and they relate to different documentation you are about to attach, please take a moment to name the files thoughtfully to aid our comprehension, thank you.

Only one file may be uploaded.
File uploads must be smaller than 16MB.
You may upload multiple files by compressing files into a ZIP file and then uploading that ZIP file.

WELLBEING SUPPORT
The School Wellbeing Advisor, Sophie Hughes, is a member of the School Mitigating Circumstances Advisory Panel (see section 2.7 of the Student Handbook for contact details) thus will be privy to mitigating circumstances requests the School receives. There may be instances where Sophie is well placed to identify suitable support. If you would like Sophie to contact you, click the button below:

END OF FORM: WHAT HAPPENS NEXT?
Please note that the information on this form will remain confidential and will only be viewed by the School Mitigating Circumstances Advisory Panel (MCAP) which will make a recommendation to the Board of Examiners about your request. Please note that the content of mitigating circumstances requests are not shared with the Board of Examiners; rather they receive only the recommendation from the MCAP whether the request was accepted or declined and what the recommended mitigation should be for any accepted request.

Once you click below to submit your request, extension requests will be addressed under ‘Chair’s Action’; that is to say, ad hoc. This is often the most appropriate option for extension requests where time is of the essence. In such cases we will get back to you within 3 working days. All other requests shall be tabled for the next scheduled School MCAP meeting and considered by the full membership in accordance with the following meeting schedule:

- Week 2 of Term 1: week beginning 11 October 2021;
- Week 7 of Term 1: week beginning 15 November 2021;
- Week 2 of Term 2: week beginning 17 January 2022;
- Week 7 of Term 2: week beginning 21 February 2022;
- Week 2 of Term 3: week beginning 09 May 2022;
- Last week of June (i.e. approximately one week before the Exam Board meeting).

Following the MCAP meeting and typically within 3 working days, the School will write to you with an outcome. If you have not heard back or if you have any questions at all, please contact us at desenior.tutor@imperial.ac.uk.

IF THE DETAILS AROUND YOUR REQUEST CHANGE:
An example would be where you indicated via your response/s that you would not sit an exam, but you ended up doing so. The auto acknowledgement email you shall receive upon clicking submit below will cite a ‘retake survey’ link to allow you to update your response. You must do this if material details pertaining to your request changed since you completed the form or if there are new circumstances, or e.g. supporting information. This will allow the panel to make decisions based on all the relevant details. Requests as of the Friday before the cited week shown above shall be deemed final, so make sure you exact any updates by then.
YOUR WELLBEING:
We know that students can suffer from serious and unforeseen circumstances during the course of their studies. If you require support, please reach out to your Personal Tutor, the School Senior or Deputy Senior Tutor and/or the School Wellbeing Advisor. Their details can be found in the DE Student Handbook.