

Imperial College London

Faculty of Engineering

Department of Civil and Environmental Engineering

MSc

Environmental Engineering Cluster

Student Handbook

2022-23

The information provided in this handbook is subject to change, depending on the prevailing situation.

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Welcome to the College

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

From Fleming's discovery of Penicillin to Gabor's invention of holography, Imperial has been changing the world for well over 100 years.

You're now very much a part of this community of discovery and we hope you will take this opportunity to make your own unique contribution. At Imperial, we expect all members of our community, whether students or staff, to share and demonstrate our values of respect, integrity, collaboration, innovation and excellence in all we do and strive to achieve.

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 enrich your experience. 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.

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

We actively encourage you to seek out help when you need it and try to maintain a healthy work-life balance. Our choice of over 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.

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



Our Principles

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

Imperial will provide through its staff:

- A world class education embedded in a research environment
- Advice, guidance and support
- The opportunity for students to contribute to the evaluation and development of programmes and services

Imperial will provide students with:

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

Imperial students should:

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

The Imperial College Students' Union will:

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



www.imperial.ac.uk/students/our-principles



Welcome to Imperial College London and the Graduate School!

The Graduate School is responsible for the postgraduate experience at the College and we work closely with the Students' Union to ensure that when decisions are being made, which affect your time at Imperial, your voice is heard.

Another important aspect of our role is to offer you a free and exciting range of professional development opportunities. Our programme is offered to you through multi-mode delivery so that you can access it wherever you are in the world.

Our team of tutors have a variety of research and other career experiences. We understand the importance of developing professional skills and our courses will help you to progress in your academic studies and research and will prepare you for your future career. Whether you wish to pursue a career in academia, industry or something completely different, professional development training will improve your personal impact. You will also get to meet students from other Departments when attending our courses.

The Graduate School runs exciting competitions throughout the year which are an opportunity to broaden your knowledge as well as to meet other students and have fun.

Our primary way to communicate to you will be through our monthly newsletter. However, do check our website, blog and social media platforms to keep up to date with all the latest activities available to you.

Finally, Imperial College is an extremely exciting, stimulating and diverse environment in which to work, to study and to research. Do make the most of all that the College and your programme has to offer.

The Graduate School

You automatically become a member of the Graduate School when you register as a postgraduate student at Imperial.

The Graduate School has been set up to support all postgraduate students at the College through:

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

'Masterclass' professional skills courses


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


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

All courses can be booked online.



Contact us

 Level 3, Sherfield Building, South Kensington Campus

 020 7594 1383

 graduate.school@imperial.ac.uk

 www.imperial.ac.uk/graduate-school

1. Introduction to the Department

1.1 Welcome from the Head of Department

It is with great pleasure that I welcome our returning and new students. I hope you had a restful, rejuvenating and enjoyable break despite the continuing difficult and challenging circumstances caused by the pandemic in some parts of the world.

I am particularly excited to welcome you to the Department, and hope that you join or return with a renewed vigour and energy! Your Department is absolutely committed to giving you an excellent education and all-round experience in a safe, secure, convivial and conducive environment that will allow you to maximise your potential. Your health, safety and well-being are of paramount importance to us, and I ask you to take great care to follow our relevant guidance that will be availed to you.

You will be studying alongside some of the brightest and most motivated students from around the world, taught by exceptional and internationally leading experts. A strength of our Department, and the College as a whole, is its diversity (including nationality and culture with well over 50 nationalities represented in our Department alone).

I wish you the very best in all your endeavours in the coming year. I look forward to meeting you in person.

Professor Washington Yotto Ochieng, FREng

1.2 Welcome from the Environmental Engineering Cluster Director

I would like to extend a warm welcome to you all as you join the MSc programme in Environmental Engineering under the direction of the Environmental and Water Resources Engineering Section (EWRE) in the Department of Civil and Environmental Engineering at Imperial College London.

The Environmental Engineering programme is a vocational programme, central to which are the concepts of sustainability and delivery of engineered solutions to conserve resources and protect the environment and human health. The history of the programme has its origins in Public Health Engineering established as a postgraduate programme in 1950. On joining the programme, you will become part of a long tradition of alumni of several hundred graduates who have benefited from the teaching and training delivered by the Section. EWRE is one of the largest and most active sections within the Department with an extensive and diverse portfolio of research, and one that plays a leading role in national and international research activities, providing advice and guidance to UK and overseas governments, international agencies and industry.

The Environmental Engineering MSc programme provides, for both engineers and scientists, a rigorous treatment of the fundamental principles and practices of assessing and protecting the environment and human health. The programme deals with major topics in the provision of environmental services such as water supply, wastewater treatment, municipal solid waste and hazardous waste management, and resource conservation and recovery as applied to both developed and developing countries. The multidisciplinary nature of Environmental Engineering is reflected in the staff involved in the programme, whose backgrounds include chemistry, biology, statistics, geology, materials, and medicine, as well as civil engineering.

Distinctive features of this programme include its broad coverage of problems and issues concerned with the supply of clean water, sustainable resource management and pollution control; a clear focus on providing the underlying science and technology to develop and understand engineering solutions to these problems; practical lab-based training in analytical techniques to measure key parameters and detect pollutants in environmental media, and opportunities to carry out research in key areas of environmental engineering as part of national and international research projects.

The MSc programme is accredited by The Joint Board of Moderators (JBM), and the Subject Threads of *Sustainability, Design, and Health & Safety* are embedded in modules that make up the taught programme, the individual and group design projects, and the individual research projects.

The programme is structured in three parts. The taught component of the programme is delivered in two parts during the **Autumn and Spring terms**, with the teaching supported by an extensive contribution from industry and business practitioners as well as overseas academics. In the **Autumn term** you will acquire core knowledge in topics of fundamental importance in environmental engineering, whereas in the **Spring term** the course content is more applied and shows how your core knowledge can be used to address environmental engineering challenges and problems. The emphasis in the **Summer term** is on examinations in the first two weeks of the term, followed by a four month individual research project when you will use the knowledge you have acquired in the taught programme to tackle a challenging research project in a specific area of interest under the direct supervision of a member of academic staff, and in many cases, supported by an industrial sponsor. Throughout the programme there are many opportunities for you to work on your own as well as part of a team in group work; experiences which test your communication, leadership, and interpersonal skills, as well as your technical competence, time and project management skills.

Assessment of the taught Modules is one of three methods: written examination only, coursework only, or a combination of written examination and coursework. There are **two formal examination periods** (i) at the start of the **Spring term** when modules taught in the Autumn term will be assessed, and (ii) at the start of the **Summer term** when modules taught in the Spring term will be assessed.

Delivery of your programme this academic year will be in-person. If at any stage during the year we must revert to online delivery, we wish to assure you that we have the experience and procedures in place to ensure you will enjoy a dynamic and interactive experience. It remains our goal that you will receive a first-rate educational experience during your time with us.

The diversity of backgrounds, nationalities, and degree disciplines of your fellow students, all with a common goal, through this vocational programme – to add value to their first degree – will give you a unique enriching experience, and an opportunity to create lifelong friendships for the future.

I take this opportunity on behalf of the staff in EWRE to wish you all a stimulating, rewarding and enjoyable year at Imperial.

Professor Sue Grimes

1.3 Welcome from the Hydrology and Water Resources Management Cluster Director

I would like to add my welcome to you all and especially to those on the Hydrology and Water Resources Management MSc. This programme has a long and distinguished history and when

you complete it you become part of a long tradition of alumni who are now playing important roles in water resource management, environmental protection, and hydrological research in the UK and throughout the world. The programme was first established in 1955 as Engineering Hydrology and was the vision of our first cluster director, Professor Peter Wolf. Over the following years its reputation and scope increased and in the early nineties the programme name was changed to Hydrology for Environmental Management, reflecting the increasing importance of hydrology on the behaviour of the natural environment. The current name dates from 2009 and emphasises the increasing importance of water in food production, environmental sustainability, and ecosystems services. As we progress through the 21st century, the challenges we face from a growing world population and a changing climate are immense and water is at the heart of these. Whether it is in protecting people and infrastructure from the devastating impacts from flooding, managing the quality of water in the natural environment or minimising and preventing the ravages of drought. This programme will provide you with the understanding of the processes the control water, the ways we can model these and how we can use such models in management and decisions making.

The MSc programme is accredited by The Joint Board of Moderators (JBM), and the Subject Threads of *Sustainability*, *Design*, and *Health & Safety* are embedded in modules that make up the taught programme, the individual and group design projects, and the individual research projects.

The programme is structured in three parts. The **Autumn term** focuses on core knowledge of hydrological processes, measurement, and analysis, whereas the **Spring term** is more applied and shows how your core knowledge can be used to address water-related challenges and problems. As well as lectures from staff within the Department, you will also benefit from industrial experts with whom we collaborate and who are keen to share their knowledge and expertise with you. The **Summer term** comprises a 4-month research project. This allows you to use the knowledge you have acquired through the taught programme to explore and research a specific area of interest under the direct supervision of academic staff, and in many cases, supported by an industrial sponsor.

Assessment of the taught Modules is one of three methods: written examination only, coursework only, or a combination of written examination and coursework. There are **two formal examination periods** (i) at the start of the **Spring term** when modules taught in the Autumn term will be assessed, and (ii) at the start of the **Summer term** when modules taught in the Spring term will be assessed.

Delivery of your programme this academic year will be in-person. If at any stage during the year we are required to revert to online delivery, we wish to assure you that we have the experience and procedures in place to ensure you will enjoy a dynamic and interactive experience. It remains our goal that you will receive a first-rate educational experience during your time with us.

Throughout the programme there are many opportunities for you to work on your own as well as part of a team in group work; experiences which test your communication, interpersonal and leadership capabilities, along with your technical competence, and time and project management skills. One of the key features of the programme, and often a major highlight for those who have attended, is the diversity of backgrounds and nationalities of your fellow students. You will also find yourself part of a group with a variety of first degrees in science and engineering. This sharing of backgrounds and cultures will help enrich your experience on the programme and can provide lifelong friendships.

So, on behalf of our staff in the Environmental and Water Resources Engineering Section, I wish you a stimulating and productive year at Imperial.

Professor Adrian Butler

1.4 Academic and administrative staff

<p>Judith Barritt Environmental Engineering MSc Cluster and EWRE Section Administrator</p>	<p>SKEM 230 020 7594 5967 j.barritt@imperial.ac.uk</p>
<p>Professor Adrian Butler Hydrology and Water Resources Management MSc Cluster Director, and Professor in Subsurface Hydrology</p>	<p>SKEM 232 020 7594 6122 a.butler@imperial.ac.uk http://www.imperial.ac.uk/people/a.butler</p>
<p>Professor Wouter Buytaert Professor of Hydrology & Water Resources</p>	<p>SKEM 403A 020 7594 1329 w.buytaert@imperial.ac.uk http://www.imperial.ac.uk/people/w.buytaert</p>
<p>Dr Geoff Fowler Senior Research Fellow and Departmental Safety Officer</p>	<p>SKEM 413 020 7594 5973 g.fowler@imperial.ac.uk http://www.imperial.ac.uk/people/g.fowler</p>
<p>Professor Sue Grimes Environmental Engineering MSc Cluster Director, and RAEng Professor of Waste and Resource Management</p>	<p>SKEM 233 020 7594 5966 s.grimes@imperial.ac.uk http://www.imperial.ac.uk/people/s.grimes</p>
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1.5 English language requirement

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

See the Admissions website for details:

 www.imperial.ac.uk/study/pg/apply/requirements/english

For information on English language support available while you're here, see **Section 11 Wellbeing, Support and Advice**.

1.6 Attendance and absence

You must inform your Cluster Administrator if you are absent from the College for more than three days during term. If the absence is due to illness you must produce a medical certificate after seven days. If you miss an examination or the deadline for any other assessment (including lab work, in class tests, coursework or presentations) due to illness or

other unforeseeable and unavoidable circumstance you must follow the College's Mitigating Circumstances Policy and Procedure. Please note that all claims for mitigation must be submitted within 10 working days of the examination or assessment deadline. If you are unable to provide evidence at the time you must submit the claim and indicate what evidence will follow and when it can be provided. Claims without evidence will normally be rejected. Please see the section on mitigation below.

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

Summer Term: Formal teaching may have finished for the year, but while you are working on your project and writing your dissertation, you are still subject to the attendance conditions of your degree, up to the expiry of your student registration at the end of September 2023. The exceptions to this are:

- Short breaks (approved by your supervisor and notified to your Cluster Administrator by email).
- Completion of all the academic requirements of your degree.
- Approved External Study Leave (e.g. Fieldwork) (specific form to be completed – see Appendix A).

Recording of External Study Leave

For those of you spending periods of time abroad which form part of your research project (e.g. Fieldwork, if permitted), such absences must be covered by the Postgraduate Taught (MSc): Recording of External Study Leave.

The process is under review and will be shared with you via the [MSc Central Student Information Site](#).

1.7 Key dates 2022–2023

Term dates

Autumn term:	1 October 2022 - 16 December 2022
Spring term:	7 January 2023- 24 March 2023
Summer term:	29 April 2023 - 30 June 2023
Late Summer term:	02 July 2023 - 30 September 2023

Closure dates

Christmas/New year:	24 December 2022 - 2 January 2023 (College reopens on 3 January 2023)
Easter Holiday:	6 April 2023 – 12 April 2023 (College reopens on 13 April 2023)
Early May Bank Holiday:	1 May 2023
Spring Bank Holiday:	29 May 2023
Summer Bank Holiday:	28 August 2023

Key events

Great Exhibition Road Festival: 17 June 2023 – 18 June 2023

1.8 Imperial Mobile app

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

 www.imperial.ac.uk/imperialmobile

1.9 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.

1.10 Imperial Success Guide

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

 www.imperial.ac.uk/success-guide

2. Programme Information

2.1 Programme overview

The Environmental MSc programmes within the Civil & Environmental Engineering Department are offered as two streams (i) Environmental Engineering and (ii) Hydrology and Water Resources Management.

The aims of our suite of MSc courses are to:

- Attract very able engineers, scientists, and related professionals from around the world by offering in-depth courses that focus on particular specialist areas and develop and extend students' knowledge, professional skills and research experience.
- Meet the expectations of industry and academia, preparing graduates for professional or research careers in the UK and overseas, developing curricula that evolve to match the subjects' changing requirements.
- Advance understanding of the underlying engineering science and practical techniques that underpin engineering.
- Provide teaching and learning that is informed by research and practice at the forefront of academic or professional disciplines.
- Provide an opportunity for students to show originality in the application of knowledge, and an understanding of how the boundaries of that knowledge are advanced through research.
- Develop students' ability to deal with complex issues both systematically and creatively, demonstrating originality in tackling and solving problems.
- Engender the qualities needed for employment in circumstances requiring sound judgement, personal responsibility, and initiative, in complex and unpredictable professional environments.
- Meet the career needs of students seeking specialist employment in engineering, addressing the skills needs of their potential employers.
- Provide students with a solid technical basis in the key areas of the engineering profession through delivery of a coherent, coordinated, and balanced degree programme, integrating core engineering science with practical application.
- Enable students to acquire a mature appreciation of the context in which engineering projects are developed within the industry.
- Develop our students' excellence in oral and written communication, and poster presentations.
- Provide students with sufficient material to explore the subject, to carry out self-organised study, and to think about the issues and challenges of the material, in preparation for professional practice.

2.2 Programme structure

The full-time programme is taken over 12 months, with a single-entry point per year at the beginning of October.

2.3 Programme delivery

Modules will be delivered through a series of lectures through multimode delivery, although teaching methods will vary between individual modules. Other teaching methods employed may include tutorials, group discussions, group work, computer laboratory sessions, practical work delivered through video training, and others depending on the member of academic staff

responsible. Some lectures will be delivered by visiting academics or industry professionals, where appropriate.

2.4 Computer requirements

All incoming MSc students are required to have a laptop computer for their Environmental Engineering MSc cluster programmes. As part of the MSc programme, students will receive the latest versions of the following software: Matlab (Mathworks), MathType (Design Science), Microsoft Office.

As part of your projects, you might be asked to use the free software (Q-GIS, Python and R). As some of the software we use only runs under MS Windows, Windows emulation software (such as Bootcamp) is needed for those of you with Macbooks.

2.5 Submission of coursework

Coursework submissions will be online and details on submission will be provided by the setter.

Submitting Coursework

MSc coursework will be set with a due date and time, and specific submission information will be made available to students. All coursework during the 2022/2023 academic year is to be submitted online only.

If you have difficulties in submitting your coursework, please contact your Cluster Administrator.

Receiving Marked Coursework

Lecturers should return coursework within three weeks of it being handed in (four, if this period includes a College vacation). If there is a delay you should consult your MSc Cluster Administrator.

Returned Marked Coursework

Copies of marked coursework will be held by your Cluster Administrator so that these can be made available for inspection by the External Examiners prior to the Board of Examiners meeting at the end of the academic session.

Penalties for late submission

Submissions made within 24 hours after the deadline has passed will have the mark capped at 50%. Submissions made more than 24 hours after the deadline has passed will receive a mark of zero.

2.6 Module descriptors

A full list of all MSc Environmental Engineering Cluster module descriptors can be found on the following link:

2.7 Research Project – Environmental

The aim of the Research Dissertation (Research Project – Environmental) is to undertake a specific piece of independent research in the form of a critical review, a modelling/numerical analysis project, or, where appropriate, a laboratory- or field-based experimental investigation.

Students will normally be required to work full-time on their Research Dissertation commencing in the summer term immediately following completion of the MSc examinations in the summer term through to the end of August.

The deliverables from the Research Project include:

- A Research Paper: which is limited to 12,000 words maximum (excluding references and appendices)
- A Poster presentation: which describes the project and the research findings in a visual and graphical manner.

2.8 Projects

Below is a list of typical example projects from the Environmental Engineering MSc Cluster:

- *An overview of global and regional initiatives preventing plastics reaching the oceans*
- *Occurrences and impacts of microplastics within the freshwater environment*
- *The dichotomy between the Waste Hierarchy and the Circular Economy*
- *Sustainable Packaging for Alcoholic Beverages – Opportunities and Challenges*
- *Regulated bans: Would policies that standardize products transform recycling?*
- *Evaluating the viability of establishing container-based sanitation in Freetown Sierra Leone*
- *Development of a technical and people-centred conceptual framework to identify critical interventions to expand waste collection coverage in underserved communities*
- *Biomimicry and genetic algorithms: A way forward for optimization of material recycling facilities*
- *The role of cobalt in a hydrogen economy*
- *How satellite imagery helps to extend waste collection in urban-slums*
- *Biodegradability of plastic packaging manufactured from polyhydroxyalkanoate biopolymers*
- *Technoeconomic assessment of the anaerobic digestion of lignocellulosic biomass and options for biogas utilization in developing countries*
- *Fungal pretreatment of lignocellulosic biomass for biogas production by anaerobic digestion*
- *Computational modelling of micro-aerated anaerobic digestion using bio-energetics*
- *Machine vision for better waste characterization*
- *Modelling of a modern Material Recovery Facility*
- *Adsorbent and ion exchange systems for nutrient recovery from wastewater*
- *Design of safe water-contact infrastructure for Schistosomiasis endemic regions*
- *Quantitative risk assessment model for Schistosomiasis*
- *Faecal sludge treatment: decision-making framework and case study*

- *Quantification of impacts of 'Blue-Green Solutions' on improvement of air quality in urban areas*
- *Blue Green Solutions for Integrated Planning of urban river rehabilitation*
- *Feasibility of biopolymer production in wastewater treatment compared to standard energy recovery practices from sewage sludge anaerobic digestion*
- *Bioenzymes recovery from sewage sludge using ultrasound – pilot-scale trial design*
- *Potential contribution of the various materials used in tyre manufacture to global carbon dioxide emissions and sustainability: a literature review*
- *Machine Learning methods for the analysis of water quality in water supply networks*
- *Resilience analysis for water supply networks*
- *Development of a wastewater treatment and reuse recommendation tool for the city of Bangalore*
- *The role of rating curve uncertainty in real-time flood forecasting*
- *Organic contaminant transfer to the food chain from recycling water materials in agriculture*
- *Towards a more adaptive water distribution network in Barcelona*
- *Evaluating the sustainability of primary water collection systems in Egypt*
- *Mapping high-mountain wetlands in the Peruvian Andes using random forest classification*
- *Regionalisation of unit hydrographs to assess the relative impacts of land cover and land-use on the hydrological response for tropical high-Andean catchments*
- *An analysis of the leachate from cigarette filter*
- *Options for ammonia recovery from wastewater treatment and product utilization*
- *Analysis of gaps in existing Nature-based solutions and quantification of their benefits in Lodz, Poland*
- *Worm-based sanitation: current developments and challenges to scaling*
- *Modelling the hydrological responses due to elevated atmospheric CO₂ at the BiFoR FACE*
- *Modelling residential and non-residential sectors' energy flow and approaches to reduce greenhouse gases emissions: a case study in London*
- *Waste plastic bonded sand as sustainable construction materials in developing countries*
- *Application of numerical models to investigate the vertical heterogeneity in the Chalk aquifer*
- *Quantifying the capacity of SuDS to offset flooding*
- *Monitoring the presence and persistence of SARS-CoV-2 in wastewater: the present and the future*
- *A rainfall generator for the entire globe*
- *Estimation of compound hydro-meteorological hazard intensification under a changing climate*
- *Effects of climate change and reforestation in the Eden Catchment using the LISFLOOD model*
- *Is flood a blessing?*
- *Potential of hydrams in maximising hydropower output, conserving water resources, and tidal energy harvesting*

2.9 Risk assessment forms

For those of you taking a fieldwork or a lab-based project, if permitted for you to do so, it is **compulsory** that you complete and submit a risk assessment form.

Purely desk-based projects conducted at the College do not need a risk assessment.

See the link below for where to find the form. This must be done on the Safety Management Site on SharePoint:

<https://imperiallondon.sharepoint.com/sites/foe/CivilEng/Healthandsafety/default.aspx>

Please let the General Office know if you have any issues accessing the SharePoint site.

2.10 Supervision arrangements

Research projects will differ in their area of focus, but their role is to challenge the student to complete an independent piece of research under the direct supervision of a member of academic staff and may involve supervision from external parties from other academic institutions and industry. Staff will provide one-on-one support and students are encouraged to maintain good contact with their supervisor throughout the period of research. The extent and nature of supervision will vary from one member of staff to another, so should a student have any difficulty, during the course of research, interfacing with their supervisor they should advise the Cluster Director or Cluster Administrator as soon as possible.

2.11 Timetable

Your timetable will be delivered direct to your Imperial College Outlook calendar.

2.12 Reading lists

Each of your modules on Blackboard Learn will include a direct link to the core and supplementary recommended texts on Leganto, the reading list software.

 <http://www.imperial.ac.uk/admin-services/library/learning-support/reading-lists/>

2.13 Programme specification

Programme specifications will be located here:

<https://www.imperial.ac.uk/staff/tools-and-reference/quality-assurance-enhancement/programme-information/programme-specifications/>

2.14 Accreditation and professional membership

We would like to encourage you to become a Student or Graduate Member of the Professional Institutions in your chosen field of study. The following professional bodies are relevant for the Master's programmes that we are running in the Department of Civil and Environmental Engineering.

Further details of our accreditation are to be found at:

 <https://www.imperial.ac.uk/study/pg/civil-engineering/environmental-engineering/>

The Chartered Institution of Water and Environmental Management (CIWEM)

Student membership is free.

 <http://www.ciwem.org/membership/>

The Chartered Institution of Wastes Management (CIWM)

Student membership is free.

<http://www.ciwm.co.uk/ciwm/membership/>

The British Hydrological Society (BHS)

Concessionary fees available to students.

<http://www.hydrology.org.uk/>

2.15 Development of professional skills

Professional skills development will be delivered throughout the curriculum in various forms, including teamwork, problem-solving, applying concepts to real-world situations, and formal presentations.

<https://www.imperial.ac.uk/study/pg/graduate-school/students/masters/professional-development/>

2.16 Work opportunities

The Department encourages you to take early advantage of the careers' education information and guidance available from the following sources:

- College Careers Advisory Service (Level 5, Sherfield Building), with which you can book careers appointments, quick interview sessions, skills workshops, mock interviews, and much more.
<http://www.imperial.ac.uk/careers/>
- The transferable skills training programme run by the Graduate School.
www.imperial.ac.uk/students/academic-support/graduate-school/
- Careers presentations and careers fairs, which occur throughout the autumn and spring terms. Details are circulated to all students closer to the dates.
- Details of jobs will be posted on the careers sections of the website. New posts are notified to us throughout the year, so check online regularly:
<https://www.imperial.ac.uk/careers/about/jobslive/>
- Specific support for Civil and Environmental Engineering students can be found here:
<https://www.imperial.ac.uk/careers/plan-your-career/what-can-i-do-with-my-degree/>

Additionally, you can contact the Departmental Careers Advisor, Dr Peter Stafford for further guidance and information: p.stafford@imperial.ac.uk

2.17 Employability statement

Planning for your future is an important aspect of postgraduate study. At Imperial you'll be well-supported by our Careers Service, who are on hand to help in a variety of ways:
<http://www.imperial.ac.uk/careers>

Imperial is one of the UK universities most targeted by graduate recruiters who also play an active role in our career development programme. This provides access to hundreds of potential employers in a range of settings including industry sector forums, employer presentations, careers fairs, mock interviews and our one to one 'recruiter-in-residence' sessions.

A large number of employers also advertise their opportunities each year through JobsLive – our online careers platform, which Imperial students can access from the first day of term: <https://www.imperial.ac.uk/careers/about/jobslive/>

2.18 Competency statements

See the Department's MSc [competency standards](#) detailing the college's expectations of students studying all taught programmes in the Faculty of Engineering.

3. Assessment

Within your course of study you will have different types of assessment which may include, coursework, examinations, timed remote assessment, presentations, labs or other forms of practical assessment.

The College has policies and procedures to support the setting, sitting, marking and moderation of all assessment. These can be found within the Regulations and College Policies at:



www.imperial.ac.uk/about/governance/academic-governance/regulations/



www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

3.1 Criteria for the award of the degree

Award of a Postgraduate Certificate (PG Cert)

To qualify for the award of a postgraduate certificate a student must have a minimum of 30 ECTS credits at Level 7

Award of a Postgraduate Diploma (PG Dip)

To qualify for the award of a postgraduate diploma a student must have passed modules to the value of no fewer than 60 credits at Level 7.

1. and no more than 10 ECTS credits as a Compensated Pass;

Award of a Postgraduate Degree (MSc)

To qualify for the award of a postgraduate degree a student must have:

1. accumulated credit to the value of no fewer than 90 credits at level 7;
2. and no more than 10 ECTS credits* as a Compensated Pass;
3. the minimum module mark for which compensation is allowed is 40.00%
4. met any specific requirements for an award as outlined in the approved programme specification for that award.

** Note: The programme is JBM-accredited and no more than 10 credits as a Compensated Pass are permitted.*

Classification of Postgraduate Taught Awards

The College sets the class of Degree that may be awarded as follows:

1. **Distinction:** The student has achieved an overall weighted average of 70.00% or above across the programme.
2. **Merit:** The student has achieved an overall weighted average of above 60.00% but less than 70.00%.
3. **Pass:** The student has achieved an overall weighted average of 50.00% but less than 60.00%.
 - a. For a Masters, students must normally achieve a distinction (70.00%) mark in the dissertation in order to be awarded a distinction.
 - b. For a Masters, students must normally achieve a minimum of a merit (60.00%) mark in the dissertation in order to be awarded a merit.

Programme Specification Regulations

In addition to the classification rules set above, the following rules apply:

- Students must normally have no more than 10 ECTS credits below 60.00% to be awarded a Distinction.
- Students must normally have no more than 10 ECTS credits below 50.00% to be awarded a Merit.

3.2 As a guide, grades should be interpreted as follows:

Mark	Grade	Comment
85+	A*	Outstanding - distinction standard
70-84	A	Distinction standard
60-69	B	Good
50-59	C	Adequate (Pass Level)
The following are subject to discussion by the Board of Examiners		
40-49	D	Unsatisfactory/borderline
30-39	E	Not satisfactory – may need to be retaken
0-29	F	Not satisfactory – may need to be retaken

3.3 Criteria: Project work and coursework only

Mark	Grade	Criteria
85-100	A*	Distinction Standard: Outstanding achievement and presentation beyond the expectation of the supervisor and making little demand for supervisory support.
70-84	A	Distinction Standard: Excellent work and presentation; substantial level of independent enquiry, of critical thought or creative ability.
60-69	B	Good: Well organised, clearly presented and adequately detailed; thorough grasp of relevant principles; some evidence of independent enquiry, of critical thought or creative ability; assessment of alternative solutions, designs or approaches.
50-59	C	Pass: Substantially correct; basic understanding of relevant principles; some evidence of enquiry; substantially competent in design, calculation and organisation; modest evidence of creative or critical ability; adequately presented; adequate level of consistent effort.
40-49	D	Unsatisfactory/Borderline: Some elements correct; incomplete understanding of relevant principles; some competence in routine tasks; somewhat lacking in presentation or in the application of consistent effort. Just acceptable.
30-39	E	Possibly recoverable: Work displaying little or no understanding of the relevant principles; failure to develop an approach that would achieve the desired outcome; major elements incorrect. Unacceptable.
0-29	F	Not Satisfactory.

3.4 Criteria: Dissertations for the Environmental Engineering cluster

MARK RANGE %	CRITERIA
90 to 100	Distinction Standard: Outstanding achievement and presentation of publishable work for submission, on its own, to a leading peer-reviewed journal; evidence of exceptional level of independent enquiry, critical thought, and creative ability.
80 to 89	Distinction Standard: Excellent work and presentation; comprehensive level of understanding and strong evidence of independent enquiry, critical thought, and creative ability. Novel contribution to knowledge in the field of study and presentation of a significant amount of publishable material towards a peer-reviewed journal
70 to 79	Distinction Standard: Very good work and presentation; evidence of substantial level of independent enquiry, critical thought, and creative ability; contains a high calibre of presentation of work and quality of research which, with minor alterations, has the potential for submission to a respectable peer-reviewed journal, either on its own or when combined with other work.
60 to 69	Merit Standard: Well organized, clearly presented and adequately detailed; thorough grasp of relevant principles; some evidence of independent enquiry, of critical thought or creative ability with some advancement of knowledge in the field of study which on its own would not be deemed of publishable quality
50 to 59	Pass Standard: Evidence of basic understanding of relevant principles; modest level of enquiry, critical thought or creative ability; adequately presented piece of research that demonstrates an adequate level of consistent effort.
<50	Fail/Unsatisfactory

3.5 Mitigating circumstances

If you have a problem or issue affecting your study, coursework, or examinations, you must ensure that you inform a member of staff immediately, this might be your Cluster Director, a member of the administrative staff, or the Senior Tutor (Postgraduate) as soon as possible. A wide variety of things can be considered in mitigation, from health issues (physical or mental, acute or chronic) to bereavement or financial hardship.

If something out of your control affects your ability to study or to take assessments, then it may be considered as a mitigating circumstance.

Process:

- If these circumstances affect examinations or other assessments, you should submit a mitigating circumstances form to your Department within 10 working days of the assessment or coursework submission deadline.
- The form must be supported by appropriate documentation, which may follow the submission of the mitigating circumstances form, if not immediately available.
- Please contact your Cluster Administrator, or the General Office if a problem arises on the day of an exam.

Submissions will be considered by the Departmental MSc Mitigating Circumstances Board, further information on which is available at the following:

<https://imperiallondon.sharepoint.com/sites/CivilMScStudentHandbook>

At this link you will find the College Policy on Mitigating Circumstances, the Mitigating Circumstances claim form, the Departmental Protocol for Extensions requests (applicable when the Mitigating Circumstances are affecting a course work), the Extensions request form, the Members of the MSc Mitigating Circumstances Board, and a link to submit your Mitigating Circumstances claim electronically. At this webpage, you will also find the presentation done by the Senior Tutor Postgraduate to students, explaining the process. Please note that your claim will be processed in a strictly confidential manner, and only the Members of the MSc Mitigating Circumstances Board will have access to your claim. If you need any support prior to submitting the Mitigating Circumstances claim, please feel free to contact your Cluster Administrator, the Secretary of the MSc Mitigating Circumstances Board (Fionnuala Ni Dhonnabhain cimscmc@imperial.ac.uk) or the Senior Tutor for Taught Postgraduate Courses (Dr Adam Jan Sadowski, a.sadowski@imperial.ac.uk).

For independent support and advice, contact the Imperial College Union Advice Centre: <https://www.imperialcollegeunion.org/advice>

Please note:

- The Imperial College Health Centre cannot certify an illness if you have not been seen at the Health Centre during the illness.
- The Imperial College Student Counselling Service can only provide a letter on request if you already attend counselling.
- The Imperial College Disability Advisory Service can only help students to obtain appropriate evidence of disability prior to examinations taking place and are not able to certify for absences due to disability.

3.6 Unsatisfactory progress in year

For students not attending or progressing to the satisfaction of the Cluster Director during the term, a note of warning may be issued. This is called a “six-week warning” and is the equivalent to notice of withdrawal. If there is not satisfactory improvement, then withdrawal will be required. The regulations may be found at the following:

https://www.imperial.ac.uk/media/imperial-college/administration-and-supportservices/registry/academic-governance/public/regulations/2019-20/Student-Withdrawalsand-Appeals-Procedure_1920.pdf

This may result in:

- (For Visa-dependent students) a report being sent to the UK-VI, and curtailment of the student Visa, and potentially revoking the right to remain in the UK.
- (For sponsored students) a report being made to your sponsors.
- Withdrawal from the programme.

3.7 Past examination papers

A sample examination paper for each examined module will be made available on the Blackboard Learn Virtual Learning Environment (VLE).

3.8 Instruction to candidates for examinations

Students who are candidates for examinations are asked to note that all examinations are conducted in accordance with the College Regulations. The relevant set of regulations will depend on your programme and year of entry, please see our Regulations webpage to determine which apply to you:



www.imperial.ac.uk/about/governance/academic-governance/regulations/

Instructions for exam candidates can be found here:



www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/exam-arrangements-and-re-sits/Instructions-to-candidates-for-examinations.pdf

3.9 Academic integrity and academic misconduct

As your course of study continues, you will be taught the concept of academic integrity and how you can ensure that any work that you complete now, or in the future, conforms to these principles. This means that your work acknowledges the ideas and results of others, that it is conducted in an ethical way and that it is free from plagiarism. Academic integrity is fundamental to learning, teaching and research and it is important to understand what it means you and the international community of research that you are joining.

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:



www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity--exam-offences/

Definitions of the main forms of academic misconduct can be found below.

3.10 Plagiarism

Please refer to section 5 Plagiarism of this handbook for full Departmental guidelines.

Plagiarism is the presentation of another person's thoughts, words, images, research or diagrams as though they were your own. Another form of plagiarism is self-plagiarism, which

involves using your own prior work without acknowledging its reuse. Plagiarism may be intentional, by deliberately trying to use another person's work by disguising it or not citing the source, or unintentional where citation and/or referencing is incorrect.

Plagiarism must be avoided, with particular care on coursework, essays, reports and projects written in your own time but also in open and closed book written examinations. You can support your understanding of proper referencing and citation by using the resources available from the College such as the Library learning support webpages at:

 www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/

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

TurnitinUK is an online text matching service which assists staff in detecting possible plagiarism. The system enables institutions and staff to compare students' work with a vast database of electronic sources. Your programme team will explain how it is used in your programme

 www.imperial.ac.uk/admin-services/ict/self-service/teaching-learning/turnitin/

3.11 Collusion

This is the term used for work that has been conducted by more than one individual, in contravention of the assessment brief. Where it is alleged that there has been collusion, all parties will be investigated under the Academic Misconduct procedure.

You should note that whilst the College encourages students to support each other in their studies you should be careful to ensure that you do not exceed any assessment brief with regards to individual work, always acknowledge the contributions of others in your work, and do not leave yourself open to allegations that you have supplied answers to enable another student to commit academic misconduct.

3.12 Examination offences

Examination offences fall into two categories. These are offences that may be disruptive in the exam venue or are considered an attempt to cheat. Examples of disruptive behaviour includes causing a disturbance in the exam room, having an electronic device that has not been fully turned off or talking in the exam room. Behaviour that may be considered an attempt to cheat includes bringing unauthorised material into an exam (such as notes, unauthorised books or other material), attempting to communicate with others apart from the invigilator, or trying to remove examination material without permission. You must ensure that you follow all reasonable instructions of the invigilators.

3.13 Dishonest practice

This is the most serious category under the procedure. Examples of dishonest practice include bribery, contact cheating (buying work from an essay mill (which is illegal in the UK) or other individual to submit as your own), taking an exam for someone else or getting someone else

to take an exam for you, attempting to access exam papers before the exam, making a false claim for mitigating circumstances or providing fraudulent evidence, falsifying documentation or signatures in relation to assessment or a claim for mitigating circumstances.

4. Examinations

The information in this section is subject to change and update.

4.1 Examination guidance and regulations

The guidance offered in this section, and following, refers to in-person on-campus examinations.

Materials Permitted in Examinations:

- Pencil cases which must be clear plastic.
- College identity cards (i.e. swipe card) which must be displayed on your desk.
- Pens, erasers and other drawing instruments as required.

Unless specified or designated “Open Book”, no additional materials may be introduced into examinations by candidates. If, in the opinion of the Board of Examiners, such materials are required, they will be provided or notified to all candidates and the standard examination rubric amended to state that they will be provided or allowed. Calculators will be provided by the Department, you will be advised of the make and model in advance, to give you an opportunity to purchase one for personal use. Dictionaries are not permitted.

No food is permitted in an examination room unless prior permission has been given due to medical need. No drinks are permitted except for water in clear plastic bottles.

4.2 Conduct of Examinations

- Be prepared.
- Take with you only the items listed above.
- Arrive 15 minutes before the exam is scheduled to begin.
- When you enter the examination room, do so in **SILENCE**.
- Switch off your phones (and other electronic devices) and place them in your bag.
- Electronic watch devices are not permitted.
- Leave your bags in the area indicated by the Invigilator or Supervising Academic.
- Find the desk with the examination card which has your candidate number (or name) on it, then sit down at this desk.
- **DO NOT turn over or open your examination paper until you are instructed to do so by the Invigilator.** You may, however, start to fill in the front of your answer book giving:
 - Candidate number (CID).
 - Degree (subject).
 - Title of paper.
 - Date.
- You **MAY NOT SPEAK** to anyone other than the Invigilator. If you do need to speak to the Invigilator, raise your hand. Speak in a quiet voice so as not to disturb the other candidates.
- Write in black or blue ink. Candidates **are not permitted to use red or green ink**, or to use any writing implement that is capable of producing red or green marks on the script. You should not write in pencil.
- If unsure of the meaning of a word or question in the examination, write down your interpretation of that word or question, and continue.
- The use of correction fluids (e.g. Snopake® and Tippex®) is **explicitly** not permitted.
- Candidates should indicate incorrect work by drawing a single diagonal line through the work concerned.

- At the end of the examination, stop writing when instructed to do so by the Invigilator or Supervising Academic.
- Ensure that your answer book and all supplementary papers carry your College Identifier Number (which is also your candidate number), and that all graph paper and supplementary answer books are securely tied together **inside the back cover of the main answer book**. All of your exam materials will be collected in a designated folder.
- Remain seated and silent.
- When all examination materials have been collected by the examination team and you have been told you may leave, please do so in silence, collecting your belongings on the way out. You may not remove any examination material from the room.

4.3 Exam Technique

- Read the rubric carefully BEFORE answering any questions.
- Take some time to read through the questions and make a sensible decision as to which questions to tackle.
- Ask yourself:
 - Which questions can I answer fully?
 - Out of the questions I cannot answer fully, which ones can I answer the majority of?
 - Am I fulfilling the exam rubric? You must make sure you have understood the rubric; ask your invigilators if you need clarification.
 - For example: How much time should you spend answering each question? If there are four questions to complete in two hours, that is approximately 30 minutes per question.
- If you make a mistake just draw a single line through your work.

5. Plagiarism

5.1 Introduction to plagiarism

You are reminded that all work submitted as part of the requirements for any examination (including coursework) of Imperial College must be expressed **in your own words and incorporate your own ideas and judgements**.

Plagiarism, that is the presentation of another person's work, thoughts or words as though they were your own, must be avoided, with particular care in coursework, essays and reports written in your own time. Note that you are encouraged to read and criticise the work of others as much as possible. You are expected to incorporate this in your thinking and in your coursework and assessments, but you must acknowledge and label your sources.

Direct quotations from the published or unpublished work of others, from the internet, or from any other source must always be clearly identified as such. A full reference to their source must be provided in the proper form and quotation marks used. Remember that a series of short quotations from several different sources, if not clearly identified as such, constitutes plagiarism just as much as a single unacknowledged long quotation from a single source. Equally, if you summarise another person's ideas or judgements, figures, diagrams or software, you must refer to that person in your text, and include the work referred to in your reference list or bibliography. Staff are able to give advice about the appropriate use and correct acknowledgement of other sources in your own work.

The direct and unacknowledged repetition of your own work which has already been submitted for assessment can constitute self-plagiarism. Where group work is submitted, this should be presented in a way approved by your Department. You should therefore consult your tutor or cluster director if you are in any doubt about what is permissible. **You should be aware that you have a collective responsibility for the integrity of group work submitted for assessment.**

The use of the work of another student, past or present, constitutes plagiarism. Where work is used without the consent of that student, this will normally be regarded as a major offence of plagiarism.

Failure to observe these rules may result in an allegation of cheating. Cases of suspected plagiarism will be dealt with under the College's Exams, Assessments and Regulations, & Plagiarism, Academic Integrity & Exam Offences, a full copy of which can be found at the following: <http://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/> and is likely to result in a penalty being taken against any student found guilty of plagiarism.

There have been in the past a few cases of plagiarism in this Department, where we operate a zero-tolerance policy, leading to penalties that range from voiding a coursework mark to expulsion from the programme. **In the majority of these cases, plagiarism was the result of poor practice and lack of awareness, so you are strongly advised to familiarise yourself with what constitutes plagiarism and to seek clarification if and when in doubt.**

5.2 Ethics and academic integrity

There are at least two very good reasons why plagiarism should be allowed no place in the academic business of Imperial College, and why it must therefore be met by severe punishment whenever it is encountered.

At its most fundamental, plagiarism is seeking to deceive somebody – one’s teachers or examiners, for example – by presenting the ideas of another person as though the ideas were one’s own – whether with that person’s assistance, or by theft. Deception and intellectual theft are morally unacceptable in any well-ordered society. In a society of professionally licensed engineers, such conduct is even more reprehensible in that it undermines the ethical foundation on which professional practice is based.

There is also a question of academic integrity. Students who knowingly use plagiarism as a painless way of compiling the work needed for assessments, and teachers who knowingly allow students to do it, are both contributing to a blight that undermines the quality and integrity of the degree qualification.

Students under intense pressure to produce a design, a technical report, or a dissertation may feel tempted to resort to plagiarism. They must resist. The Imperial College degree is highly prized because it is respected far and wide as a true mark of achievement. To safeguard the integrity of its degrees, Imperial College staff must take action whenever plagiarism is suspected. As for students, they must expect that the penalty for a student who is guilty of this offence will normally be severe.

5.3 Definition of plagiarism

Plagiarism is the presentation of another person’s thoughts, words, images or diagrams as though they were your own – for example when you copy someone else’s work or use their ideas in your coursework, thesis, report etc., and then do not acknowledge that you have done this.

Dictionary definition

‘The wrongful appropriation or purloining, and publication as one’s own, of the ideas, or the expression of the idea (literary, artistic, musical, mechanical, etc.) of another.’

Oxford English Dictionary. 2nd ed. (1989) Clarendon Press, Oxford.

Other forms of plagiarism include self-plagiarism, which involves using your own prior work without acknowledging its reuse; and collusion, which involves sharing or copying (individual) coursework.

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

Plagiarism is classified as either Minor or Major in nature, this is normally determined by the weight, or marks value, attached to the work submitted. However, the following would also be classified as major:

- Two cases of Minor plagiarism by the same individual.
- Copying the work of another student without their knowledge.
- Dissertation/Major Project.
- Where the student does not admit that plagiarism has occurred, and that the plagiarism offence is upheld on appeal.

You are **not** permitted to act in collusion with another student or person, nor are you permitted to request or arrange for another individual to submit your coursework for you.

You must NEVER:

- Share your work, either electronically or in paper copy. If copying of material occurs as a result of such sharing, both parties are considered to have actively taken part in plagiarism.

- Give your work to someone else to submit. If copying of material occurs as a result of such activity, both parties are considered to have actively taken part in plagiarism.
- Submit work on behalf of another student.

5.4 Collaboration (joint & group work) and collusion

It can be difficult to understand the difference between collaboration and collusion.

Collaboration: Unlike collusion (where the work of another student is intentionally used with that student's consent) which equates to deception, collaboration is encouraged as a professional skill much needed in engineering work. Collaboration involves mutual effort and joint work, to the benefit of all the parties involved, and where appropriate it should always be acknowledged, via footnotes for example. Students required to submit individual pieces must be clear on the distinction between the two.

Discussing coursework exercise submission with colleagues is fine: – *what does the teacher expect from the work, what different approaches might there be, how much detail would be needed, how structured should the report be?* In exploring with a colleague a range of approaches, or how to obtain specific solutions, one finds a positive help in learning something new. However, if the work is required to be an individual submission, then a line must be drawn where joint work is left behind and the individual work which is submitted for assessment should take over.

The results or calculations that form the basis of the report should be obtained by the individual student who is submitting the report as their own work, unless there is a clear expectation that others would be involved – as in the results of a survey – but then the contribution of the others should be made clear (for example, as footnotes in the report). The student is expected to write the report in their own words, to think of their own interpretations of the results and to make their own conclusions and recommendations.

Group work, for example group design projects, is work which is set by the teacher for joint working between two or more students and in which it is clearly understood that the teacher will give the assessment for the joint work undertaken. This provides valuable working experiences and learning opportunities, but these high-minded intentions can be severely undermined if any member of the group should not contribute in equal measure with their colleagues.

You should **always** assume that your coursework is individual work, unless it is clear that group assessment is planned by the teacher. If in doubt, seek the teacher's advice about what working practices are acceptable. Do not hand over your work, under any circumstances, to another student.

Collusion: Where the work of another student is used **with** that student's consent.

5.5 Exam offences and dishonest practice

Exam offences include behaviour such as bringing authorised material into an exam, attempting to communicate with others apart from the invigilator, trying to remove examination material without permission, taking an exam for someone else or getting someone else to take an exam for you.

Examples of dishonest practice include bribery, contact cheating (buying work from an essay mill or other individual to submit as your own), attempting to access exam papers before the

exam, making a false claim for mitigating circumstances or providing fraudulent evidence, falsifying documentation or signatures in relation to assessment.

5.6 Referencing

The recommended method of referencing is the Harvard style (author-date). All students have free access to RefWorks, an online reference management software package. More information is at the library website, and library staff will provide training.

<http://www.imperial.ac.uk/admin-services/library/learning-support/reference-management/>

5.7 Advisory Services

Academic staff

Your main source of information, and the College's main source for the recognition of plagiarism, is the academic staff. Please be aware that you can approach them for advice and information if you are unsure or require clarification.

The library

You can contact your librarian for help with the library, advice on finding information and referencing, either in person in the Central Library, room 110 or by emailing:

- Subject Librarian: Nicole Urquhart, n.urquhart@imperial.ac.uk

The Central Library provides several sources of further information relating to referencing and plagiarism awareness:

- A guide to referencing and citing correctly, including how to use the Harvard style is available at <http://www.imperial.ac.uk/admin-services/library/learning-support/reference-management/>
- Further information about plagiarism awareness within College, please see the library website at <http://www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/>
- In addition, you will be required to complete the Graduate School's Blackboard course, "Ensuring Integrity 1: Plagiarism Awareness" for Master's students, using your College username and password. The course is available at <http://bb.imperial.ac.uk> and provides guidance on the avoidance of plagiarism.

TurnitinUK

TurnitinUK is an online service that enables institutions and staff to carry out electronic comparison of students' work against electronic sources including other students' work. Once papers have been submitted to the system they become part of the database, and will be used for future checking.

IP / data protection

Some people have asked whether departments need to seek permission from students before submitting their work to a plagiarism detection system. The answer is no as the registration form, which is signed by students, states the following:

The College may submit your coursework to an external plagiarism detection service. By registering with the College, you are giving your consent for any of your work to be submitted to such a service'.

5.8 Submission of individual items of coursework

Copying the work of others without acknowledgement of the source of the information is academic fraud, known as plagiarism. Wilfully copying is outright cheating, forgetting to list references and reference material is ineptitude. Neither form of plagiarism is acceptable and may well result in one or more parties, deemed to be involved, being awarded a mark of zero, and may carry a requirement to resubmit the work depending on the allocated weighting. All coursework, project work and research submissions, including dissertation must contain the following statement, which you are required to sign.

Declaration: I confirm that this submission is my own work. In it, I give references and citations whenever I refer to, describe or quote from the published, or unpublished, work of others.

Signature: _____

Failure to attach the signed declaration to your coursework submissions may result in their being unmarked or returned with a mark of zero.

An example of a Coursework Cover Sheet is given in Appendix C.

6. Board of Examiners

CHAIR

Professor Stephen Smith

EXAMINATIONS OFFICER

Dr Athanasios Paschalis

MEMBER OF THE DEPARTMENTAL MSc MITIGATING CIRCUMSTANCES BOARD

Professor Sue Grimes (or alternate)

SECRETARY

Judith Barritt

MEMBERS

All staff involved in the delivery, setting, and marking of assessments for the programmes.

EXTERNAL EXAMINER

Professor Rachel Gomes MBE, University of Nottingham

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 experience. It is 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.

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/

7. Location and Facilities

7.1 Location

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

Your main location of study will be:

Department of Civil and Environmental Engineering
Skempton Building
South Kensington Campus
Imperial College London
London SW7 2AZ

The Skempton Building can be accessed from 07.00-00.00 daily. The main entrance requires the use of your college ID card between the hours of 07.00-08.00 and 18.00-00.00. During weekends and vacation periods you will be required to use your college ID card each time you enter and exit the building.

Your ID cards will be required to access PC laboratories and certain other rooms and spaces.

The Department's postgraduate office is located at SKEM 118 (ground floor- entrance foyer) in the Skempton Building. Standard opening hours are Monday – Friday, 08.00 – 17.00.

7.2 PC Laboratories

The Skempton Building houses three PC laboratories located in rooms 208, 314, and 317. The City and Guilds Building houses PC laboratories in rooms 203, 761 and 762. These facilities are shared with the Department of Aeronautics and the Department of Mechanical Engineering. Computer rooms are for use during timetabled sessions only. Further PC facilities are available in, and shared with, and the College's Central Library.

A full list of the College rules regarding computer use are available at:

 <http://www.imperial.ac.uk/admin-services/ict/>

7.3 ICT resources

Find information on activating your College account, connecting to Wifi, using the Virtual Learning Environment (Blackboard Learn), and more ICT resources available for new students, visit:

 <http://www.imperial.ac.uk/admin-services/ict/new-to-imperial/students/>

7.4 Shared teaching space

The Faculty of Engineering is committed to utilising its facilities and teaching space, hence there are a number of shared teaching spaces between Departments/Buildings. Teaching space in the Skempton Building is often timetabled to accommodate lectures between the Civil and Environmental, Mechanical, and Aeronautical Engineering Departments.

7.5 College ID cards

Student ID cards will be available for collection from the General Office in the Skempton Building General Office, provided that:

- A photo had been uploaded to the required portal by the deadline
- Confirmation of attendance at the Day 2 Induction Session (which includes the prerequisite Health & Safety Induction).

Late arriving students should see their cluster administrator.

7.6 Printing and binding

There are five multi-function printers in the Skempton Building. The first is in room 317, two are located in the BOSS Space on level 2, and a further two in room 218 adjacent the BOSS Space.

Additionally, the Paragon Print Room is in Room 024 of the Sherfield Building. Paragon also offer binding at £1.00 per document. Paragon can be contacted by email at: imperial.college@paragon-cc.co.uk

There are networked printers across the South Kensington Campus, which you can access with your College ID card. When you print a document, it is sent to a common print queue, meaning that you can collect it from any touch card printer that your College ID card gives you access to, including the Central Library and Departments across the Campus.



<https://www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/printing-photocopying-and-scanning/>

7.7 Lockers

There are 312 lockers located on Level 3, Skempton, of which 156 have been allocated to MSc students. An application form will be circulated at the start of term for students to fill out to secure a locker. Please note that lockers are allocated on a first-come-first-served basis.

7.8 Lost property

If you think you have lost something within the Department your first port of call is the Reception. If it is not there you should check with the Security Office in Sherfield as it may have been handed in there. If an item is handed in with ID, an email will be sent to the owner immediately to inform them.

All items found within the Department (e.g. keys/phones/bags) should be handed into the Reception. All items found outside the Department should be handed into the Security Office in the Sherfield Building in the South Kensington campus:



<https://www.imperial.ac.uk/estates-facilities/security/lost-and-found/>

7.9 Facilities management

Showering facilities are available within the Department and are located in the toilets on levels 0 and 3.

Bicycles are not permitted within the Department. This is College policy. The following link provides information on suitable bicycle storage within the South Kensington Campus:

 <https://www.imperial.ac.uk/estates-facilities/>

7.10 Room bookings

Please note: **We do not make room bookings for Imperial College Union Societies.** These need to be made via the Student Union.

Room booking requests outside of normal College hours should be made via the Conference Office: conferenceandevents@imperial.ac.uk.

7.11 Central library

The Central Library at South Kensington is open 24 hours for study space, and further space is available to all students in GoStudy on levels 4 and 5 of the Chemistry Building.

Make sure you find out who your subject librarian is as they'll be able to help you find books and online resources for your assignments. Also, don't forget to check out the Library's range of training workshops and our other campus libraries for access to specialist medicine and life sciences resources. You can borrow up to 40 books and, whether you're working on or off site, you'll be able to access e-books, e-journals and databases from our collection of almost 400,000 titles. If we don't have what you need, we can get it for you, simply ask us to buy it or request a copy through our free Document Delivery service.

For any questions our staff will be happy to help, simply chat with us online or contact us via email, phone or social media, just check our website for details:

 www.imperial.ac.uk/library

7.12 Departmental library

The Civil Engineering Library provides a space for the exclusive use of students and staff of the Department. Funded by the Department, the Library hosts a collection of around 15,000 books, 400 online and print journal titles, a large collection of reports from industry, and historical collections. During term time it is open from 09.00 to 19.00, Monday-Thursday, and 09.00-17.00 on Fridays.

Our dedicated Librarian offers support with coursework and information skills in one-to-one or group formats. The Library engages with students via Twitter @CivEngLib.

Further information about the library and its services is available from the library staff and from the Departmental Library webpage:

Departmental Library, Room 402

<http://www.imperial.ac.uk/civil-engineering/about-us/library/>

7.13 Institution of Civil Engineers Library (ICE)

Located at the ICE headquarters, One Great George Street, the ICE Library and Archives collection spans more than 200 years and is one of the largest resources in civil engineering literature in the world. In addition to printed material, the ICE library also offers access to several digital services, including e-books. All ICE members can borrow up to three items in person or via post. The Members Resources Hub in the Library also offers a quiet place to work.

Institution of Civil Engineers Library and Archives



1 Great George Street, London, SW1P 3AA



020 7665 2251



library@ice.org.uk



<https://www.ice.org.uk/disciplines-and-resources/ice-library-and-digital-resources>

7.14 Shuttle bus

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



www.imperial.ac.uk/estates-facilities/travel/shuttle-bus

7.15 Maps

Campus maps and travel directions are available at:



www.imperial.ac.uk/visit/campuses

7.16 Accessibility

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



www.accessable.co.uk/organisations/imperial-college-london

7.17 Smoke-free policy

All Imperial campuses and properties are smoke-free. This means that smoking by staff, students or visitors 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

7.18 SafeZone

SafeZone is a College app through which you can quickly and directly contact the Security team whenever you need them. Whether you're in an emergency situation, 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 for and is now available to download on the Apple and Android App stores. Visit www.imperial.ac.uk/estates-facilities/security/safezone/ for more details about SafeZone.

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.

7.19 Changes due to Coronavirus (COVID-19)

The College will keep you informed about any further changes that may affect you due to the impact of coronavirus (COVID-19). The COVID-19 FAQs on the website are a repository of helpful information and the latest guidance can be found at:

 www.imperial.ac.uk/about/covid-19/

8. Working While Studying

If you are studying full time, the College recommends that you do not work part-time during term time. If this is unavoidable we advise you to work no more than 10–15 hours per week, which should be principally at weekends and not within normal College working hours.

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

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

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

The College's examination boards will not normally consider as mitigating circumstances any negative impact that part-time work during term-time may have had on your performance in examinations or in other assessed work. Examinations or vivas cannot be rescheduled to accommodate your part-time working arrangements.

9. Health and Safety

9.1 Departmental safety contact

Your Departmental safety contact is:

Dr Geoff Fowler
SKEM 413, Skempton Building
020 7594 5973
g.fowler@imperial.ac.uk

9.2 Introduction

Keeping you safe is a top priority for us. Since 1 April 2022, the UK Government removed all restrictions on public areas, including Universities and education settings. Imperial College still encourages students to wear face coverings in crowded areas, to stay at home if you have symptoms of respiratory disease, to get fully vaccinated, to cover your coughs and sneezes, and to respect others' personal space.

The latest Imperial College guidance to students can be seen at:

 www.imperial.ac.uk/about/covid-19/students/

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

 www.imperial.ac.uk/safety/safety-by-topic/safety-management/health-and-safety-policy-statement/

9.3 The College Safety Department

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

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

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

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

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

 www.imperial.ac.uk/safety

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

9.4 Occupational Health requirements

The College Occupational Health Service provides services to:

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

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

 www.imperial.ac.uk/occupational-health

9.5 Communications

It is not possible to provide a service for incoming telephone messages except in the case of emergency. Please ensure that your family/next of kin are aware of the following contacts:

Civil Engineering General (Postgraduate) Office

00 44 (0) 207 594 5929 (Fionnuala Ni Dhonnabhain)
00 44 (0) 207 594 5932 (Yamini Chikhliya)
00 44 (0) 207 594 6123 (Angela Frederick)
00 44 (0) 207 594 5931 (Melanie Hargreaves)

Environmental Engineering & Hydrology

00 44 (0) 207 594 5967 (Judith Barritt)

Please ensure that your student-e-service contact details are up-to-date at all times, including your next-of-kin-contact information.

The Department is not able to provide a postal or fax service.

9.6 Working alone and emergency contact numbers

If using a personal phone, the number to call is 020 7589 1000

If using an internal College phone, the number to call is 4444

It is prohibited under College safety regulations for any person to work alone in a laboratory or workshop at any time. At least one other person must be within calling distance. All members of the College must know how to contact the College's emergency response services.

Please save the following number in your mobile/cell phone for use in all emergencies anywhere on the College's South Kensington campus – including where an ambulance is felt

to be needed, the call will go direct to the College Security Control Desk: **020 7589 1000**. The Security team are on duty 24/7 and will assess the emergency and implement the necessary response for the situation (including calling the London Emergency services).

Any activity involving tools or machinery is deemed to be "working in a laboratory or workshop". Purely office or computing activities are excluded.

Full details are given at the front of the orange Health and Safety Booklet – see Appendix E.

10. College Policies and Procedures

10.1 Regulations for students


All registered students of the College are subject to the College Regulations. The relevant set of regulations will depend on your programme and year of entry, please see our Regulations webpage to determine which apply to you:

 www.imperial.ac.uk/about/governance/academic-governance/regulations


 www.imperial.ac.uk/students/terms-and-conditions

10.2 Academic feedback policy

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


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

Please note that your examination scripts once completed belong to the College under the GDPR legislation. 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/

10.3 Provisional marks guidance

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

 www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/mark-and-moderation/Guidelines-for-issuing-provisional-marks-to-students-on-taught-programmes.pdf

10.4 Late Submission Policy

You are responsible for ensuring that you submit your coursework assessments (including time remote assessments) in the correct format and by the published deadline (date and time). Any piece of assessed work which is submitted beyond the published deadline (date and time) would be classed as a late submission and will incur a penalty (a cap at the pass mark, or it is

classed as a fail). Further guidance on Late Submission of Assessments can be found on the Academic Governance website:

 www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/markings-and-moderation/Late-submission-Policy.pdf

If you submit late due to mitigating circumstances, you may be able to make a claim that means that the cap on your mark is lifted. Please see **10.5** below and the policy document above.

10.5 Mitigating circumstances

During your studies you may be affected by sudden or unforeseen circumstances. You should always contact your personal tutor for advice and support. If this happens at the time of, or immediately preceding your assessments you may be able to make a claim for mitigating circumstances. If successful this claim enables the Board of Examiners when reviewing your marks at the end of the year to have greater discretion with regards to offering repeat attempts (either capped or uncapped), a repeat year, or with your progression or final classification. Please note, the Board are not permitted to amend the marks that you were awarded, only to take your claim into account making decisions.

All claims must be supported by independent evidence and submitted within 10 working days of the assessment deadline. Any claim made after this deadline is likely to be rejected unless there is a good reason (such as you were still unwell) until the point of submitting the claim. Details of the College's Mitigating Circumstances procedure can be found under the Mitigating Circumstances tab on the page below:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/

Through the procedure you may also be able to request an extension deadline to some forms of assessment. Wherever possible it is expected that this is used as it will enable you to complete your studies within the same College year (rather than over the summer holiday or in the next year).

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 at: <https://www.imperial.ac.uk/disability-advisory-service/>


10.6 Academic misconduct policy and procedures

As has been highlighted under the Academic Integrity section, it is important that you learn how to properly attribute and acknowledge the work, data and ideas of others. Any proven form of academic misconduct is subject to penalties as outlined in the College's Misconduct Policy and Procedures.

 www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/


10.7 Unsatisfactory Engagement

Unfortunately sometimes students struggle to make satisfactory progress in their study or their engagement with their studies falls below our expectations. The College has a process to identify and support students by reaffirming these expectations with an action plan. If a student does not engage satisfactorily with these supportive measures, they can be withdrawn from their studies. The full details of this process, and the appeals procedure relating to it can be found at:

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

10.8 Academic appeals procedure

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. Should 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:

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

10.9 Arithmetic marks check

If you consider that there may have been an error in the adding up of your marks, you may request an arithmetic mark check. Please note that this must be requested within 10 working days of the official notification of your results from the Results team in Registry. You may not request a marks check for a previous year of study.


 <https://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/appeals/>

10.10 Student complaints

The College strives to ensure that all students are well supported in their studies and receive a good experience of their programme and the wider College activities. If you feel that your experience has not lived up to these expectations the College has an agreed Students Complaints process through which your concern can be investigated and considered.


If you have any concerns about your experience at the College and have been unable to address these informally, you should contact Student Complaints who can provide advice about what is the appropriate way to seek to resolve this at:

 student.complaints@imperial.ac.uk

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

10.11 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. This Procedure is currently under review and will be updated during the 2022-23 academic year. The general principles of the Student Disciplinary Procedure are available on the College website:

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

10.12 Intellectual property rights policy

For further guidance on the College's Intellectual Property Rights Policy is available on the College website:

 www.imperial.ac.uk/research-and-innovation/research-office/research-policies/research-related-policies/ip-policy/

Further information about the Imperial Enterprise Lab can be found at:

 www.imperial.ac.uk/students/enterprising-students
 www.imperialenterpriselab.com/support/experts-in-residence

10.13 Use of IT facilities


View the Conditions of Use of IT Facilities:

 www.imperial.ac.uk/admin-services/ict/self-service/computers-printing/conditions-of-use-of-it-resources/

10.14 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.

 www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/admissions/Privacy-Notice-for-Students-and-Pro prospective-Students.pdf

11. Wellbeing, Support and Advice

Your Department has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time at Imperial.

11.1 Your Personal Tutor

Your Personal Tutor within the Environmental Engineering MSc Cluster is your Cluster Director, who is your first point of contact for pastoral support and advice. You can arrange to have a meeting with them at any time during your studies. If necessary, they will direct you to an appropriate source of support.

11.2 Senior Tutor (Postgraduate)

In the event of an issue arising, within the Department there are a number of avenues for you to seek support. This will include your Senior Tutor for Taught Postgraduate Courses (Dr Adam Jan Sadowski, a.sadowski@imperial.ac.uk), and other designated staff such as:

- Personal Tutors (as appropriate)
- Cluster Directors
- MSc Taught Courses Manager
- Cluster Administrators/General Office

11.3 Mental Health First Aiders

Specific members of staff within the Department, and the rest of the College, are trained as Mental Health First Aiders (MHFA).

MHFAs will provide you with a safe space to start a confidential talk about your mental health, and signpost you to the most appropriate source. You can identify MHFAs by looking for bright green lanyards and checking the Departmental First Aid notices (also contained in Appendix E of this handbook).

 www.imperial.ac.uk/health-and-wellbeing/mental-health/mental-health-first-aid/

11.4 Support Staff

The Department has a wealth of experienced and capable support staff. Departmental support staff will often be your first port-of-call if you have any queries or need assistance.

 www.imperial.ac.uk/civil-engineering/people/departmental-officers-and-support-staff/

11.5 Departmental Wellbeing Officer

Michelle Langan, the Student Wellbeing Advisor can provide you with confidential support and advice with a variety of things such as:

- Drug and alcohol awareness
- Bereavement and loss

- Exercise and staying active
- Food and healthy living
- Gender and identity
- Sexuality
- Mindfulness
- Sleep hygiene
- Anxiety, stress and panic attacks
- Self-harm
- Suicidal feelings
- Loneliness and homesickness
- General wellbeing

Appointments for all Civil Engineering students are available by email at m.langan@imperial.ac.uk – these are currently 30 or 60 minute confidential in person or Teams appointments.

11.6 Departmental Disability Officers

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

Your Departmental Disability Officer is: to be advised
Email: to be advised

More information on Departmental Disability Officers is available at: <https://www.imperial.ac.uk/disability-advisory-service/about-us/departmental-disability-officers/>

More information about how to request additional arrangements for exams if you have a disability is available at: www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/additional-exam-arrangements-in-respect-of-disability

11.7 Your Union

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

11.8 Imperial College Union Advice Centre

The ICU Advice Service delivers free, confidential, and impartial advice covering academic issues, complaints and disciplinaries, College accommodation, and internal and external signposting. Contact advice@imperial.ac.uk and complete the registration form to speak with a member of the team.

 www.imperialcollegeunion.org/advice

11.9 Student representatives

Imperial College Union operates two Representation Networks of over 600 elected student representatives – the Academic Representation Network and the Wellbeing Representation Network. Reps represent the voice of students and can direct you to internal and external support services. The Union’s Liberation Officers also work to make sure that the views of under-represented and interest groups are heard at the College.

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

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

11.10 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, and exams.

 www.imperial.ac.uk/student-hub

11.11 Student Support Zone

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.




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



11.12 Useful support contacts

Health and wellbeing

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

Disability Advisory Service

 Room 566, Level 5, Sherfield Building, South Kensington Campus
020 7594 9755
 disabilities@imperial.ac.uk
 www.imperial.ac.uk/disability-advisory-service

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/students/international-students/



Careers


Careers Service

 Level 5, Sherfield Building, South Kensington Campus
 020 7594 8024
 careers@imperial.ac.uk
 www.imperial.ac.uk/careers

ICT and software

ICT Service Desk

 Central Library, South Kensington Campus
 020 7594 9000

 www.imperial.ac.uk/ict/service-desk

Software shop

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


12. Student Administration

The Student Administration 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 Administration 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

 +44 (0)20 7594 7268

 student.records@imperial.ac.uk

Degree certificates

 +44 (0)20 7594 7267

 certificates@imperial.ac.uk

13. Work-Life Balance

The pace and intensity of study at Imperial can be demanding so it's important to find time for outside interests.

13.1 Civil Engineering Society (CivSoc)

The Civil Engineering Society is the departmental student society, of which all Undergraduate and Postgraduate students are automatically members. Run by an elected committee of students, CivSoc is one of the most active departmental societies in the College and organises regular events throughout the academic year. These include numerous lunchtime lectures given by industrial companies, site visits, social events and parties. The highlight of the CivSoc year is the extremely popular international trip in the spring, open to all students in the Department. Additionally, CivSoc writes and publishes the departmental student newspaper LIVIC.

All students are encouraged to participate in CivSoc-run activities. Announcements concerning upcoming events and society news are emailed to all members, displayed on the screen in the second floor Breakout Student Space, as well as being available on CivSoc's website and social media pages.

Your CivSoc Chair is Raagavi Satkunanathan. See <https://www.imperialcollegeunion.org/your-union/your-representatives/a-to-z/civil-environmental-engineering-ug> for more information about student representatives and the CivSoc committee.

13.2 Imperial College Union

The Union's range of 360+ student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of ways for you to enjoy your downtime.

 www.imperialcollegeunion.org/about-us

13.3 Move Imperial

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

More information about Imperial student memberships and updates to our services can be found at:

 www.imperial.ac.uk/ethos/memberships/students

With an annual fee of £35 you will get use of the gym and swimming facilities on our campuses.

 www.imperial.ac.uk/sport

We have a huge collection of online resources, home workout videos, healthy recipes and playlists available to all as part of our MoveMore campaign, more information can be found at:

 www.imperial.ac.uk/sport/move-more/


14. Student Feedback and Representation

14.1 Feedback from students

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

14.2 Student representation

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

 www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview

14.3 Staff-Student Committee

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

 www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback

15. Student Surveys

Your feedback is important to your department, the College and Imperial College Union. Whilst there are a variety of ways to give your feedback on your College experience, the following surveys give you regular opportunities to make your voice heard:

- **Module Evaluation Questionnaire (MEQ)**

The MEQ is your chance to tell us about the modules you have attended. The questionnaire is open to students across all years of study and runs at the end of the autumn, spring and summer terms. The survey is confidential. The more you take part the more representative the results so please take a few minutes to give your views.

Last academic year, the College asked students to take part in the Postgraduate Taught Experience Survey (PTES). This is a national survey that helps us to compare how we are doing against other institutions, to make changes that will improve what we do in future and to keep doing the things that are valued by our students. The results of the 2022 survey are published online (link below). PTES is run bi-annually at the College.

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

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

The Union's response to surveys can be found here:

 www.imperialcollegeunion.org/your-union/your-representatives/responses

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

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

16. After Your MSc

16.1 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 Wi-Fi, 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

16.2 Opportunities for further study

After you have completed your Master's programme, you may choose to continue your studies on a PhD, CDT or other CPD programme at Imperial.

 <https://www.imperial.ac.uk/civil-engineering/prospective-students/postgraduate-research-admissions-phd/>

Explore the Departmental Alumni Profiles to find out what previous graduates have gone on to achieve:

 <http://www.imperial.ac.uk/civil-engineering/alumni/alumni-profiles/>



STAY CONNECTED

Department of Civil & Environmental Engineering

Department Alumni cv-alumni@imperial.ac.uk



Join the Imperial College alumni
www.imperial.ac.uk/alumni



Follow us on twitter
[@ImperialCiveng](https://twitter.com/ImperialCiveng)

17. Appendix A: Monitoring Your Attendance

17.1 Attendance Monitoring

Since the introduction of Tier 4 of the Points Based System in March 2009, the College has held a license permitting us to sponsor the visas of students from outside the European Union to enable them to attend our programmes.

Sponsorship of students, under our Student Visa License, brings with it an obligation for us to inform the Home Office whenever we withdraw sponsorship from a student. This may be as a result of a student withdrawing or being expelled from their programme, interrupting their studies, or not being in attendance. This is reflected in the College's regulations and procedures to ensure the welfare and academic progress for all students. See Academic Regulation Paragraph 9.4 of the General Regulations for Students:

<http://www.imperial.ac.uk/about/governance/academic-governance/regulations/>

The College does not wish to discriminate in its treatment of students from outside the European Union, and so all procedures for monitoring attendance and reporting student activity apply equally to all students.

The procedure for compliance adopted for the Master of Science Programme within the Department of Civil and Environmental Engineering is to base the monitoring of attendance around a number of 'check-points', which are:

- Start-of-Session Induction.
- Confirmation of completion of the Health and Safety Induction, which is a requirement of the College for issue of ID cards.
- Submission of selected items of coursework.
- Examinations and Progress Tests.
- Randomly selected lectures/laboratories/tutorials.
- Scheduled meetings with Personal Tutors and/or Project Supervisors.

To make this process efficient, the following shall apply.

- The Cluster Administrator (or other relevant staff) shall conduct the monitoring using a class list supplied by Imperial College Registry.
- The Cluster Administrator shall inform the relevant Senior Tutor and Cluster Director of any student who fails to interact with the College on three consecutive occasions.
- The student will be invited for interview, and a warning may be issued.
- If non-attendance continues, the Senior Tutor shall inform the Head of Department and the College Registry.
- The Imperial College Registry report directly to relevant authorities, including HEFCE, the UK-VI and sponsors.

The Department expects students to demonstrate their commitment to their degree programme by attending lectures, complying with specific requests within specified deadlines, and submitting coursework on time. If students cease to engage properly with the programme, e.g. by being absent without permission or adequate cause, this may be reported to the relevant authorities, and may result in being asked to leave the College. In the case of those attending with Student Visas, this could jeopardise the individual's ability to stay in the UK.

17.2 Internships

Postgraduate students can only undertake work placements if they are an approved part of their course of study (an example of which might be as part of the project element). Students who may wish to interrupt their studies to take an internship (in the UK or overseas) will have the sponsorship of their visa withdrawn and will need to apply for a new visa in order to return to their programme at a later date.

17.3 Recording study leave

This form should be used to cover any and all study time which is spent outside of the UK for the following situations:

17.4 Field work and data collection

Study Leave which is not subject to the Placement Learning Policy, such as extended field work. The College's Off-Site Working procedures should be followed: <http://www.imperial.ac.uk/safety>
For visa-dependent students, the College is required by UKVI to report any time away from the College as a 'change of study location' within 10 days of this change taking place. This will not impact on a student's visa status in the UK.

Please see your cluster administrator in the first instance.

17.5 Students with Student visas

The Visa Compliance Team may be contacted by email on visacompliance@imperial.ac.uk for advice.

18. Appendix B: Cheating Offences

18.1 Policies & Procedures

The Policy and Procedures contained in this document apply to all students and former students at Imperial College registered for Imperial College or University of London awards. A complete copy of the College regulations governing Cheating Offences: Policy and Procedures, under which Plagiarism is categorised, is available to download from the following link:

<https://www.imperial.ac.uk/student-records-and-data/for-current-students/undergraduate-and-taught-postgraduate/exams-assessments-and-regulations/plagiarism-academic-integrity--exam-offences/>

In any proceedings under these Policy and Procedures, the student shall be presumed to be innocent until the contrary is established beyond reasonable doubt.

Where the offence is an instance of suspected plagiarism, it shall be dealt with in accordance with the following procedures, commensurate with the severity of the suspected offence.

If you are not sure, please ask. Useful reference points are academic and library staff.

18.2 Plagiarism

Plagiarism is defined as the presentation of another person's words, ideas, judgement or data as though they were your own. For example, not referencing the source of your ideas or arguments when they have derived from your reading; taking verbatim the words of someone else's work and putting it into your project without quotation marks and referencing; taking whole sections out of books, the internet, articles, lecture notes, other reports or other students' work, and including them in your report uncited. Plagiarism may also occur in formal written examinations - the above document addresses this possibility. An example might be where candidates have been able to learn text by heart (by rote) and simply reproduce this without acknowledgement of source. Where the examination is based on technical knowledge, this may be acceptable and not regarded as plagiarism. In other subjects where candidates are asked to write essay-type questions, the examiners may regard text reproduced without reference or critical analysis as plagiarism. This will be clarified, where appropriate, in the examination rubric on the front page of the examination paper.

You should be aware that you have a collective responsibility for the integrity of group work submitted for assessment. This means that if part of the work is plagiarised, all group members will be held accountable unless proof can be provided by each individual member of their contribution. You should, therefore, retain an audit trail of your contribution for this purpose.

When submitting (both individual and group) assessed coursework you will be required to complete and attach a Coursework Cover Sheet (examples on the following page) confirming that you have read and understood the definition of plagiarism. Submitting this form will certify that the work presented is entirely your own, except where indicated.

Plagiarism is a serious offence. The Examination Board reserves the right to take further action as it deems appropriate to protect the name of the Department and the College, and this may involve expulsion of a student from the programme or delay or withdrawal of a degree award.

19. Appendix C: Cover Sheets

You are required to complete and attach a cover sheet (examples given below) to all of your assignments, group or individual, before submission. Digital copies will be sent to you, please save a personal copy and use with all coursework assignments. You must read the Plagiarism Declaration, and, in signing the cover sheet, you agree that you have understood and complied with the College's guidelines on plagiarism. Your typed name constitutes a signature.

Coursework and Project Cover Sheet Department of Civil and Environmental Engineering	
Cluster: _____	
Module: _____	
Assignment: _____	
Supervisor: _____	
Submission Deadline: _____	
DECLARATION	
<p style="color: red; font-size: small;">I understand that, unless specifically designated as Group work, all coursework submissions are individual, and that sharing my work, either electronically or in paper, is prohibited. If my submission is copied by another student, I will also be considered to have actively taken part in plagiarism.</p> <p style="color: red; font-size: small;">I certify that I have NOT:</p> <ul style="list-style-type: none"> - Shared my coursework with any other person. - Given my coursework to someone else to submit on my behalf. <p style="color: red; font-size: small;">Signature: _____ Name: _____</p> <p style="font-size: small;">I certify that I have read the definition of plagiarism given overleaf, and that the work submitted for this coursework assignment is my own work, except where specifically indicated otherwise. In signing this document, I agree that this work may be submitted to an electronic plagiarism test at any time and I will provide a further version of this work in an appropriate format when requested:</p> <p style="font-size: small;">CID: _____ Date: _____</p> <p style="font-size: small;">Note: Until an assignment carries this completed front page it will not be accepted for marking.</p>	
TO BE COMPLETED BY THE MARKER	
Grade awarded: _____ Late penalty applied: _____	
Late submission penalties are 50% for the 24 hours and 100% thereafter.	

Group Coursework and Project Cover Sheet Department of Civil and Environmental Engineering	
Cluster _____	
Module _____	
Assignment _____	
Deadline _____	
DECLARATION	
<p style="font-size: small;">I certify that I have read the definition of plagiarism given overleaf, and that the work submitted for this coursework assignment is my own work, except where specifically indicated otherwise. In signing this document I agree that this work may be submitted to an electronic plagiarism test at any time and I will provide a further version of this work in an appropriate format when requested:</p> <p style="font-size: small;">Name: _____ CID: _____ Signature: _____ Date: _____</p> <p style="font-size: small;">Name: _____ CID: _____ Signature: _____ Date: _____</p> <p style="font-size: small;">Name: _____ CID: _____ Signature: _____ Date: _____</p> <p style="font-size: small;">Name: _____ CID: _____ Signature: _____ Date: _____</p> <p style="font-size: small;">Name: _____ CID: _____ Signature: _____ Date: _____</p> <p style="font-size: small;">Note: Until an assignment carries this completed front page it will not be accepted for marking.</p>	
TO BE COMPLETED BY THE MARKER	
Grade awarded: _____	
Late penalty applied: _____	
Late submission penalties are 50% for the 24 hours and 100% thereafter.	

The Plagiarism Declaration Guidelines, which are printed overleaf on the individual/group cover sheets read as follows:

You are reminded that all work submitted as part of the requirements for any examination **(including coursework)** of Imperial College must be expressed in your own writing and incorporate your own ideas and judgements.

You must **NEVER** give your coursework, whether electronically or in paper copy, to **someone else to submit, nor should you accept to hand in coursework on someone else's behalf.** If copying of material occurs as a result of such activity, both parties are considered to have actively taken part in plagiarism.

Plagiarism, that is the presentation of another person's thoughts or words as though they are your own, must be avoided with particular care in coursework, essays and reports written in your own time. **Note that you are encouraged to read and criticise the work of others as much as possible. You are expected to incorporate this in your thinking and in your coursework and assessments. But you must acknowledge and label your sources.**

Direct quotations from the published or unpublished work of others, **from the internet, or from any other source** must always be clearly identified as such. A full reference to their source must be provided in the proper form and quotation marks used. Remember that a series of short quotations from several different sources, if not clearly identified as such, constitutes plagiarism just as much as a single unacknowledged long quotation from a single source. Equally if you summarise another person's ideas, judgements, **figures, diagrams or software**, you must refer to that person in your text, and include the work referred to in your bibliography and/or reference list. **Departments are able to give advice about the appropriate use and correct acknowledgement of other sources in your own work.**

The direct and unacknowledged repetition of your own work, which has already been submitted for assessment, can constitute self-plagiarism. Where group work is submitted, this should be presented in a way approved by your Department. You should therefore consult your tutor or cluster director if you are in any doubt about what is permissible. **You should be aware that you have a collective responsibility for the integrity of group work submitted for assessment.**

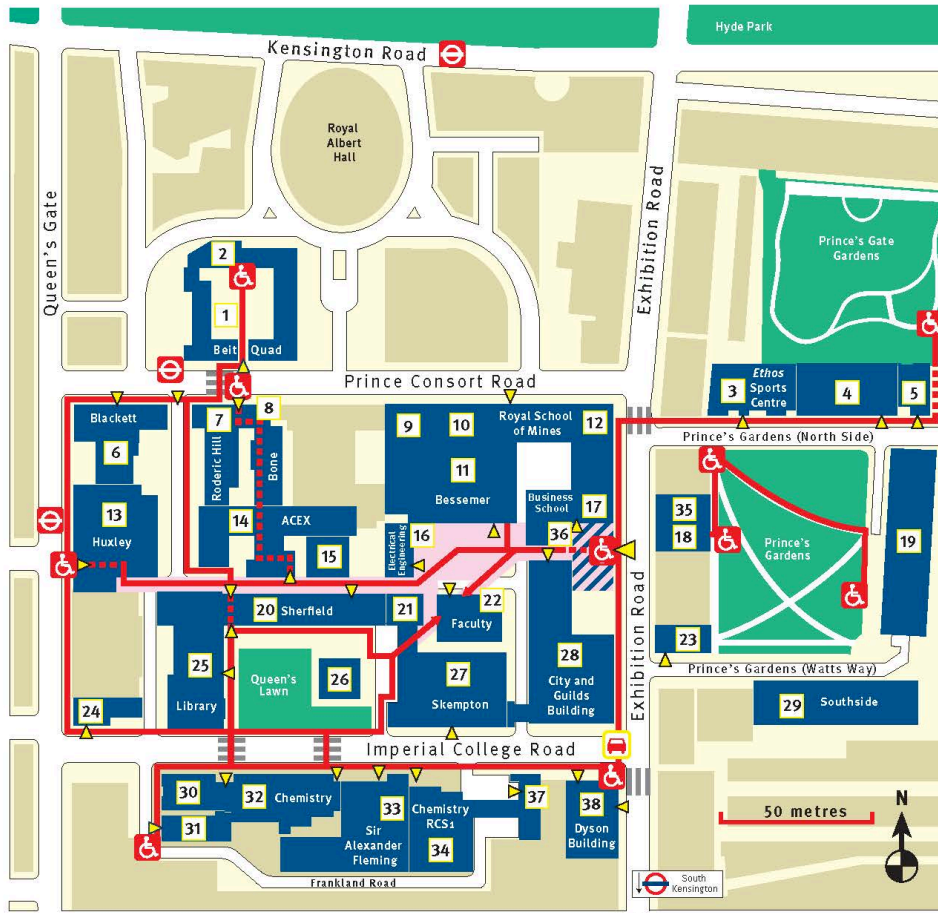
The use of the work of another student, past or present, constitutes plagiarism. Where work is used without the consent of that student, this will normally be regarded as a major offence of plagiarism.

Failure to observe any of these rules may result in an allegation of cheating. **Cases of suspected plagiarism will be dealt with under the College's Cheating Offences Policy and Procedures and may result in a penalty being taken against any student found guilty of plagiarism.**

20. Appendix D: Map of South Kensington Campus

Imperial College
London

South Kensington Campus



1	Beit Quadrangle	12	Goldsmiths Building	21	Grantham Institute – Climate Change and the Environment	30	Sir Ernst Chain Building – Wolfson Laboratories
2	Imperial College Union	13	Huxley Building	22	Faculty Building	31	Flowers Building
3	Ethos Sports Centre	14	ACE Extension	23	58 Prince's Gate	32	Chemistry Building
4	Prince's Gdns, North Side	15	William Penney Laboratory	24	170 Queen's Gate	33	Sir Alexander Fleming Building
5	Weeks Hall	16	Electrical Engineering	25	Central Library	34	Chemistry RCS1
6	Blackett Laboratory	17	Business School	26	Queen's Tower	35	52 Prince's Gate
7	Roderic Hill Building	18	53 Prince's Gate	27	Skempton Building	36	Alumni Visitor Centre
8	Bone Building	19	Eastside	28	City and Guilds Building	37	Observatory Building
9	Royal School of Mines	20	Sherfield Building Student Hub Conference Office	29	Southside	38	Dyson Building of Design Engineering
10	Aston Webb						
11	Bessemer Building						

Building key

- 1 Beit Quadrangle**
Beit Hall, Imperial College Union
- 2 Imperial College Union**
- 3 Ethos Sports Centre**
Sport Imperial
- 4 Prince's Gardens, North Side**
No.8: Early Years Education Centre
No.10: Chaplaincy, Dyson School of Design Engineering
No.11: UK Energy Research Centre
No.15: Centre for Environmental Policy
- 5 Weeks Hall**
- 6 Blackett Laboratory**
Physics, Institute of Shock Physics
- 7 Roderic Hill Building**
Biology, Centre for Process Systems Engineering,
Chemical Engineering, Composites Centre
- 8 Bone Building**
Chemical Engineering
- 9 Royal School of Mines**
Earth Science and Engineering, Materials
- 10 Aston Webb**
Earth Science and Engineering
- 11 Bessemer Building**
Centre for Blast Injury Studies, Bioengineering,
Imperial Incubator, Institute of Biomedical Engineering,
Institute for Systems and Synthetic Biology
- 12 Goldsmiths Building**
Bioengineering, Materials
- 13 Huxley Building**
Computing, Institute of Shock Physics, Mathematics, Physics
- 14 ACE Extension**
Chemical Engineering, Business School
- 15 William Penney Laboratory**
London e-Science Centre
- 16 Electrical Engineering Building**
Electrical and Electronic Engineering, Energy Futures Lab
- 17 Business School**
Innovation and Entrepreneurship, Management,
Centre for Health Economics and Policy Innovation
- 18 53 Prince's Gate**
Business School Department of Finance,
Brevan Howard Centre for Financial Analysis
- 19 Eastside**
Gabor Hall, Linstead Hall, Wilkinson Hall, Eastside bar
and restaurant, Essentials convenience store
- 20 Sheffield Building**
Level 1: Catering, Centre for Health Policy,
Queen's Tower Rooms, Security Reception
Level 2: Bank (Santander), Fuel Stop, Great Hall, Junior
Common Room, Newsagent, Optician, QT snack bar,
Senior Common Room, Union Shop
Level 3: Academic Visitors' Accommodation, Centre for
Academic English, Centre for Co-Curricular Studies,
Conference Office, Equality and Diversity Unit,
Finance, Graduate Schools, HR Pensions, Human
Resources, International Student Support, Outreach,
Centre for Continuing Professional Development,
Registry, Sport Imperial, Student Accommodation
Centre, Student Hub
Level 4: Archives, Continuing Professional Development Unit,
ICT, ICT Helpdesk, Occupational Health Service,
Safety Department
Level 5: Blyth Music and Arts Centre, Careers Service,
Communications and Public Affairs, Development,
Educational Development Unit, Estates (Projects,
Facilities, Finance, Property Management),
Read and Pippard Lecture Theatres,
Seminar and Learning Centre (SALC)
- 21 Grantham Institute – Climate Change
and the Environment**
- 22 Faculty Building**
Academic Health Science Centre (AHSC), Central Secretariat,
Climate-KIC, Communications and Public Affairs, Corporate
Partnerships, Faculties of Engineering, Medicine and Natural
Sciences Administration, Finance, Human Resources, Institute
for Security Science and Technology, Institute of Global Health
Innovation, Planning, President's Office, Research Services
- 23 58 Prince's Gate**
Ballroom, Billiard Room, Boardroom, College Room,
Garden Room, Imperial Consultants (ICON), Oak Room,
Programme Management Office – Enterprise Division
- 24 170 Queen's Gate**
Council Room, Dining Room and Solar,
President's Residence
- 25 Central Library**
Library Archives and Special Collections
- 26 Queen's Tower**
- 27 Skempton Building**
Civil and Environmental Engineering, Centre for Environmental
Control and Waste Management,
Centre for Transport Studies, Wohl Reach Out Lab
- 28 City and Guilds Building**
Aeronautics, ICT, Mechanical Engineering,
Vibration University Technology Centre
- 29 Southside**
Falmouth Keogh Hall, Selkirk Hall, Tizard Hall,
Health Centre, Dentist
- 30 Sir Ernst Chain Building – Wolfson Laboratories**
Biology, Cell and Molecular Biology, Centre for Bioinformatics,
Electron Microscopy Centre, Glycobiology Training, Molecular
Biosciences, Research and Infrastructure Centre, Centre for
Structural Biology
- 31 Flowers Building**
Cell and Molecular Biology, Centre for Integrative Systems
Biology and Bioinformatics, Chemistry, Electron Microscopy
Centre, MRC Centre for Molecular Bacteriology and Infection
- 32 Chemistry Building**
Chemistry
- 33 Sir Alexander Fleming Building**
Medicine, Biology, Biomedical Sciences, Cell and Molecular
Biology, Molecular Biosciences
- 34 Chemistry RCS1**
Biochemistry, Biology, Centre for Photomolecular Sciences,
Chemistry
- 35 52 Prince's Gate**
Imperial Innovations
- 36 Alumni Visitor Centre**
College Cafe
- 37 Observatory Building**
Dyson School of Design Engineering
- 38 Dyson Building of Design Engineering**
Dyson School of Design Engineering

A

Academic English, Centre for, Level 3 Sherfield Building 20
Academic Health Science Centre (AHSC), Faculty Building 22
Academic Visitors' Accommodation, Level 3 Sherfield Building 20
Administration for the Faculties of Engineering, Medicine and Natural Sciences, Faculty Building 22
Aeronautics, City and Guilds Building 28
Alumni Visitor Centre, 36
Archives, Level 4 Sherfield Building 20, Library and Special Collections 25

B

Ballroom, 58 Prince's Gate 23
Bank (Santander) Level 2 Sherfield Building 20
Beit Hall, Beit Quadrangle 1
Billiard Room, 58 Prince's Gate 23
Biochemistry, Chemistry RCS1 34
Bioengineering, Bessemer Building 11, Goldsmiths Building 12
Bioinformatics, Centre for, Sir Ernst Chain Building 30
Biology, Chemistry RCS1 34, Roderic Hill Building 7 Sir Alexander Fleming Building 33, Sir Ernst Chain Building 30
Biomedical Engineering, Institute of, Bessemer Building 11
Biomedical Sciences, Sir Alexander Fleming Building 33
Blast Injury Studies, Royal British Legion Centre for, Bessemer Building 11
Blyth Music and Arts Centre, Level 5 Sherfield Building 20
Boardroom, 58 Prince's Gate 23
Brevan Howard Centre for Financial Analysis, 53 Prince's Gate 18
Business School 17

C

Careers Service, Level 5 Sherfield Building 20
Catering, Level 1 Sherfield Building 20
Cell and Molecular Biology, Sir Ernst Chain Building 30, Flowers Building 31, Sir Alexander Fleming Building 33
Central Library 25
Central Secretariat, Faculty Building 22
Chaplaincy, 10 Prince's Gardens North Side 4
Chemical Engineering, Roderic Hill Building 7, Bone Building 8, ACE Extension 14
Chemistry, Chemistry Building 32, Chemistry RCS1 34, Flowers Building 31
Civil and Environmental Engineering, Skempton Building 27
Co-Curricular Studies, Centre for, Level 3 Sherfield Building 20
College Cafe, 36
College Room, 58 Prince's Gate 23
Communications and Public Affairs, Faculty Building 22, Level 5, and Seminar and Learning Centre Sherfield Building 20
Composites Centre, Roderic Hill Building 7
Computing, Huxley Building 13
Conference Office, Level 3 Sherfield Building 20
Continuing Professional Development, Levels 3 and 4 Sherfield Building 20
Corporate Partnerships, Faculty Building 2
Council Room, 170 Queen's Gate 24

D

Dentist, Southside 29
Development, Level 5 Sherfield Building 20
Dining Room and Solar, 170 Queen's Gate 24
Dyson School of Design Engineering, 10 Prince's Gardens, North Side 4, Observatory Building 37, Dyson Building of Design Engineering 38

E

Early Years Education Centre, 8 Prince's Gardens North Side 4
Earth Science and Engineering, Royal School of Mines 9, Aston Webb 10
Eastside Halls of Residence (Gabor, Linstead, Wilkinson), Eastside bar and restaurant, Essentials convenience store 19
Educational Development Unit, Level 5 Sherfield Building 20
Electrical and Electronic Engineering, Electrical Engineering Building 16
Electron Microscopy Centre, Flowers Building 31, Sir Ernst Chain Building 30
Energy Futures Lab, Electrical Engineering Building 16
Entrepreneurship Centre, Business School 17
Enterprise Division – Programme Management Office, 58 Prince's Gate 23
Environmental Control and Waste Management, Centre for, Skempton Building 27
Environmental Policy, Centre for, 15 Prince's Gardens North Side 4
Equality and Diversity Unit, Level 3 Sherfield Building 20
Estates (Facilities, Finance, Projects, Property Management) Level 5 Sherfield Building 20
Ethos Sports Centre 3

F

Faculties of Engineering, Medicine and Natural Sciences Administration, Faculty Building 22
Falmouth Keogh Hall, Southside 29
Finance, Faculty Building 22, Level 3 Sherfield Building 20
Fuel Stop, Level 2 Sherfield Building 20

G

Garden Room, 58 Prince's Gate 23
Glycobiology Training, Research and Infrastructure Centre, Sir Ernst Chain Building 30
Graduate Schools, Level 3 Sherfield Building 20
Grantham Institute – Climate Change and the Environment 21
Great Hall, Level 2 Sherfield Building 20

H

Health Centre, Southside 29
Health Policy, Centre for, Level 1 Sherfield Building 20
Health Economics and Policy Innovation, Centre for, Business School 17

Human Resources, Faculty Building 22, Level 3 Sherfield Building 20
HR Pensions, Level 3 Sherfield Building 20

I

Imperial Consultants (ICON), 58 Prince's Gate 23
ICT, Level 4 Sherfield Building 20, City and Guilds Building 28
ICT Helpdesk, Level 4 Sherfield Building 20
Imperial College Business School 17
Imperial College Union, Beit Quadrangle 1, 2
Imperial Incubator, Bessemer Building 11
Imperial Innovations, 52 Prince's Gate 35
Innovation Studies Centre, Business School 17
Integrative Systems Biology and Bioinformatics, Centre for, Flowers Building 31
International Student Support, Level 3 Sherfield Building 20
Institute for Security Science and Technology, Faculty Building 22
Institute of Biomedical Engineering, Bessemer Building 11
Institute of Global Health Innovation, Faculty Building 22
Institute of Shock Physics, Bessemer Building 11, Huxley Building 13

J

Junior Common Room, Level 2 Sherfield Building 20

L

Library (Central) 25
London e-Science Centre, William Penney Laboratory 15

M

Materials, Royal School of Mines 9, Goldsmiths Building 12
Mathematics, Huxley Building 13
Mechanical Engineering, City and Guilds Building 28
Medicine, Sir Alexander Fleming Building 33
Molecular Biosciences, Sir Alexander Fleming Building 33, Sir Ernst Chain Building 30
Molecular Microbiology and Infection, MRC Centre for, Flowers Building 31

N

Newsagent, Level 2 Sherfield Building 20

O

Oak Room, 58 Prince's Gate 23
Occupational Health Service, Level 4 Sherfield Building 20
Optician, Level 2 Sherfield Building 20
Outreach, Level 3 Sherfield Building 20

P

Pippard Lecture Theatre, Level 5 Sherfield Building 20
Photomolecular Sciences, Centre for, Chemistry RCS1 34
Physics, Blackett Laboratory 6, Huxley Building 13
Planning, Faculty Building 22
President's Office, Faculty Building 22
President's Residence, 170 Queen's Gate 24
Process Systems Engineering, Centre for, Roderic Hill Building 7

Q

QT snack bar, Level 2 Sherfield Building 20
Quantitative Finance, Centre for, Business School 17
Queen's Tower 26
Queen's Tower Rooms, Level 1 Sherfield Building 20

R

Read Lecture Theatre, Level 5 Sherfield Building 20
Registry, Level 3 Sherfield Building 20
Research Services, Faculty Building 22
Royal British Legion Centre for Blast Injury Studies, Bessemer Building 11

S

Safety Department, Level 4 Sherfield Building 20
Security Reception, Level 1 Sherfield Building 20
Security Science and Technology, Institute for, Faculty Building 22
Selkirk Hall, Southside 29
Seminar and Learning Centre (SALC), Level 5 Sherfield Building 20
Senior Common Room, Level 2 Sherfield Building 20
Shock Physics, Institute of, Huxley Building 6
Southside Halls of Residence (Falmouth Keogh, Selkirk, Tizard) 29
Sport Imperial, *Ethos* Sports Centre 3
Sport Imperial management, Level 3 Sherfield Building 20
Sports Centre, *Ethos* 3
Structural Biology, Centre for, Sir Ernst Chain Building 30
Student Accommodation Centre, Level 3 Sherfield Building 20
Student Hub, Level 3 Sherfield Building 20
Systems and Synthetic Biology, Institute for, Bessemer Building 11

T

Tizard Hall, Southside 29
Transport Studies, Centre for, Skempton Building 27

U

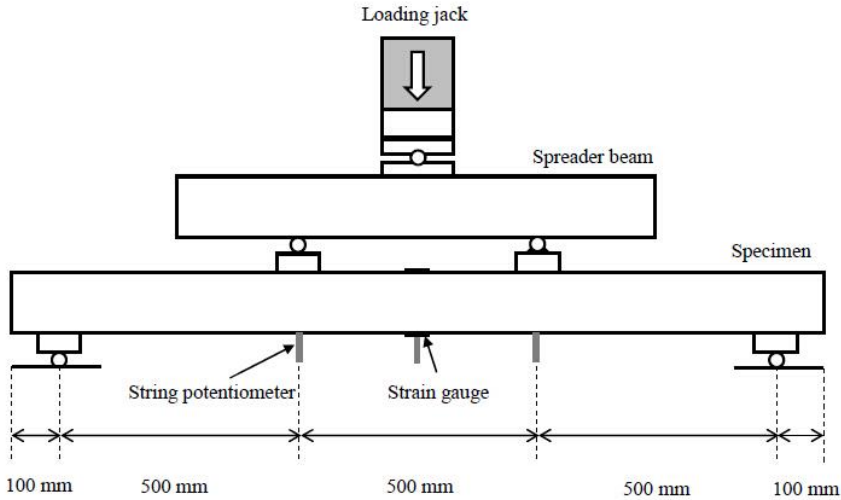
Union Shop, Level 2 Sherfield Building 20
UK Energy Research Centre, 11 Prince's Gardens North Side 4

V

Vibration University Technology Centre, City and Guilds Building 28

W

Weeks Hall 5
William Penney Laboratory 15
Wohl Reach Out Lab, Skempton Building, 27



Student Health & Safety Handbook

Department of Civil & Environmental Engineering

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**PLEASE NOTE: THIS HANDBOOK IS REVISED ANNUALLY BY THE
DEPARTMENT SAFETY OFFICER (DSO)**

**ANY CHANGES TO THE INFORMATION CONTAINED IN THIS HANDBOOK SHOULD BE
NOTIFIED BY EMAIL TO THE DSO:**

**THE DEPARTMENT SAFETY OFFICER:
Dr Geoff Fowler
Email: g.fowler@imperial.ac.uk
Office: room 413, Skempton Building
Telephone: 020 7594 5973**

SKEMPTON BUILDING

HEALTH AND SAFETY CONTACT INFORMATION

Emergency procedures:

- **MEDICAL, FIRE or SECURITY EMERGENCIES - DIAL 4444 or 020 7589 1000**
- **FIRST AID** – Contact the nearest First Aider (see separate sheet)
- **BUILDING EVACUATION** – Know your evacuation route, use the nearest staircase (east, west or central stairs). DO NOT USE THE LIFTS. Leave the building quickly and safely. Do not return to collect personal belongings.
- **ACCIDENTS + DANGEROUS OCCURRENCES** – All accidents and near misses, however minor, **MUST BE REPORTED** using the online system “SALUS”

Department Emergency Control Team

	Office		Tel.
<i>Head of Department</i>	442	Prof W. Y. Ochieng	46104
<i>Department Safety Officer</i>	413	Dr G. D. Fowler	45973
<i>Technical Services Manager</i>	417	Mr B. Whiting	46895
<i>Department Operations Manager</i>	440A	Mrs L. A. Cumming	42715

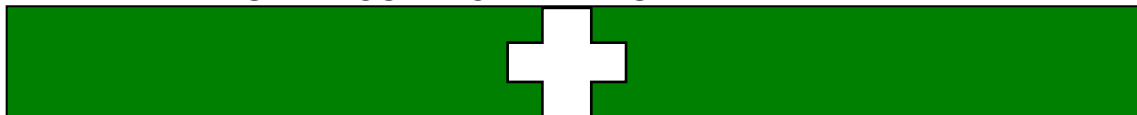
Building Health and Safety Committee

<i>Chairman of Department Safety Committee, Fleet Manager</i>	417	Mr B. Whiting	46895
<i>DSO; COSHH, DSE, Radiation, Fieldwork & Biological. Safety Advisor</i>	413	Dr G. D. Fowler	45973
<i>Manual Handling Assessor</i>	236	Mr T. Stickland	43224
<i>First Aid Coordinator</i>	413	Dr G D Fowler	45973
<i>EWRE Section Academic Safety Representative</i>	413	Dr G. D. Fowler	45973
<i>Fluid Mechanics Section Academic Safety Representative; Laser Safety</i>	328A	Dr H. Burridge	45201
<i>Geotechnics Section Academic Safety Representative</i>	533	Mr P. V. Hirani	46060
<i>Materials Section Safety Representative</i>	239	Dr M. Yio	43495
<i>Structures Section Safety Representative</i>	320	Mr A Pullen	45978
<i>Transport Section Academic Safety Representative (IITS LAB)</i>	337	Dr F. Feng	45986
<i>UG Student representative (Dept. Rep.)</i>			
<i>PG (Research) Student representative</i>		vacancy	
<i>Post-Doctoral Research Staff Representative</i>		Vacancy	
<i>Skempton Building Manager (Office in City & Guilds Building)</i>	C&G 260	Mr G. Fairhurst	49639
<i>Department of Aeronautics DSO (Office in City & Guilds Building)</i>	C&G 222	Dr N. MacCarthy	45043
<i>Department of Mechanical Eng. Deputy Safety Officer (Office in C&G Building)</i>		Ms E. Bekiri	42490
<i>Department of Mechanical Engineering, Teaching Workshop Manager</i>	150	Mr A Wallace	47015
<i>Wohl Reach Out Laboratory</i>	100	Mr K. Maghlaoui	41924
<i>Faculty of Engineering Safety Manager (Desk in Faculty Building L2)</i>		Ms B. Wallis	40821
Imperial College Safety Department (level 4 Sherfield Building)			
<i>Director of Safety</i>		Dr S. Johal	49420
<i>Safety Department Deputy Director</i>		Ms A. Pedrero-Llamas	49573
<i>Safety Department Office Manager</i>		Mr D. Hickey	49423

Any changes to this list should be notified immediately to Dr G. D. Fowler.

Email: g.fowler@imperial.ac.uk

FIRST AID TRAINED STAFF CONTACT DETAILS



First Aid

In the event of an accident or medical emergency contact the NEAREST first aider without delay! Your Nearest First Aiders are:

NAME	LOCATION	PHONE
David de Ruyter	010b	45925
Darren Jupp	010c	45957
Fionnuala Ni Dhonnabhain	118	45929
Neal Beadle	Mech. Eng. Teaching Workshop L1	41671
Aslan Kutlay		
Paul Jobson		
Gordon Herbert	236	45948
Dr Marcus Yio	239	43495
Dr Laure Sioné	304	46120
Dr Tom Rowan	304	46120
Dr Angel Nievas-Pino	507	41214
Dr James Lawrence	528A	40700
Dr Truong Le	534	42152
Dr Marc Stettler	614	42094
MENTAL HEALTH FIRST AIDERS		
Lucy Chivers	441	46098
Fionnuala Ni Dhonnabhain	118	45929
Prof. Catherine O’Sullivan	501	46117
Dr Ana Ruiz-Teran	324	46005
Alexandra Williams	613	45995/46153
Sarah Willis	443	41127

ALL FIRST AIDERS ARE DEFIBRILLATOR (AED) TRAINED

The **Nearest AED** is at the SAF Building Foyer

If you cannot get hold of a local first aider or need First Aid outside of normal working hours, **contact Security: 4444 or 020 7589 1000**

Wellbeing and Mental Health

The Department operates a zero-tolerance approach to bullying and harassment

Support can be accessed at: <https://report-and-support.imperial.ac.uk/>.

All students can access support via the Departmental tutors, the Dept. student wellbeing advisor, Ms. Michelle Langan (m.langan@imperial.ac.uk) or <https://www.imperial.ac.uk/student-support-zone/>.

For Staff: Confidential care is at <https://www.imperial.ac.uk/health-and-wellbeing/advice-and-support/confidential-care/>. Prof. Sue Grimes (s.grimes@imperial.ac.uk) and Prof. Adrian Butler (a.butler@imperial.ac.uk) provide confidential support for staff in the Department who experience bullying or harassment.

IMPORTANT GENERAL BUILDING SAFETY INDUCTION INFORMATION

Evacuation procedure:	Evacuate the building on sound of the claxon sounder and evacuation voice and go to the assembly point beside the Lions on the steps of the Queen's Tower
Campus emergency number	4444 (from an internal telephone) 020 7589 1000 (from all other telephones).
Frequency of fire drills	Annual (usually during the first 4 weeks of the autumn term)
Frequency of alarm testing	Weekly at around 8am on Tuesday mornings
Locations of:	
Fire alarm call points	<i>Five per floor located between each set of fire doors</i>
Emergency exits	See map in this book
Evacuation routes	Follow the green arrows located on the back of all office and lecture theatre doors and in the corridors
Assembly point	On the steps of the Queen's Tower
Fire extinguishers etc.	Located throughout the building, at least three sets per floor, normally adjacent the emergency exits, plus in all laboratories (look for the Red location signs)
Safety Notice Board	Located on Level 4 on the wall outside the room 415
Departmental Staff with Safety duties	See the list enclosed in this book, in the lifts and on noticeboards in lecture rooms, offices and around the building
First Aid Arrangements	
Accident reporting	Use SALUS – the online reporting system. This can be accessed from the Safety department web pages on the College intranet: http://www.imperial.ac.uk/safety
Safety Department	Provides advice on Safety issues. Located in Sheffield Building, L4.
Occupational Health	Provides advice and support (including vaccinations and health screening) for all College personnel involved in College work. Located in Sheffield Building, L4.
Security	Provides a 24 hour, college-wide service relating to building security, first aid and emergency support.
Web site information	The College intranet contains all the detailed information required to help staff & students understand College policies & procedures.
Key Web site addresses	Imperial Home Page: http://www.imperial.ac.uk/ Use the bookmarks along the top to locate the required Departments and services. For support services (non academic issues) use the A-Z index under "Admin and Service" to locate the required area. Safety is under "S"
Building Access Hours	7am-Midnight every day except Christmas Day and Boxing Day, when the College is closed.
Normal Working Hours	8am-6pm weekdays.
Departmental Hazards	All department labs are considered to be high hazard areas. Do not enter any laboratories until you have been inducted for the lab and completed a risk assessment for the planned work. The department has a "No Lone Working" policy for laboratories, which applies outside normal hours.

Department of Civil and Environmental Engineering

PPE	All UG MEng students must own a pair of steel toed and soled safety boots suitable for site work (complying with STANDARD EN ISO 20345-S3). Other PPE for MEng students will be issued later in the academic year for use throughout the MEng course. For MSc courses, the Course directors/Module leaders will advise you regarding the required PPE for your degree and/or each course activity or trip.
Dept. Safety Committee	Meets three times per year to consider all matters relating to Departmental Health and Safety. All Research and Teaching activities are discussed. Student issues are represented by the "Dep Rep".
General Advice on Safety	If you have any safety related questions, please contact the DSO: Dr G D Fowler, room 413, ext 45973, email: g.fowler@imperial.ac.uk

**Health and Safety instructions for Students
Undertaking taught courses (MEng & MSc) in the Department of Civil & Environmental
Engineering, Skempton Building**

INTRODUCTION

The Health and Safety of all students whilst studying at Imperial College is a primary concern to the Staff and College. There are several major pieces of legislation that dictate the implementation of Health and Safety Policy and Practise. We must ensure that students are not put at risk during their study at Imperial College. However, there is also a responsibility upon yourself to follow, to the best of your abilities, all instructions and guidance provided. This booklet has been written to provide an outline of Health and Safety arrangements within the Department and to provide you with guidance to your own responsibilities.

GENERAL INFORMATION

Health and Safety within the Department is organised and managed by the Departmental Safety Officer, Dr G. Fowler (room 413, ext. 45973). He is always available to provide advice and guidance on all aspects of Health and Safety. All major Health and Safety decisions are made by the Skempton Building Safety Committee, which meets every term. The committee comprises representatives from all the Sections in the Department, Users of the Building, Student representatives (UG & PG), plus staff with specialist advisory roles for particular activities that may present a risk.

The Orange Health and Safety and Green First Aid/Lifesaver notices provide Health and Safety guidance and list the members of staff with specific safety related duties and responsibilities. Copies of these notices are included inside this book and further copies are spread throughout the Department. These signs are updated regularly. You must make yourself familiar with their content.

The College has a significant amount of safety-related information available via its web site: <http://www.imperial.ac.uk/safety>.

YOUR RESPONSIBILITIES

Every member of the College community is responsible for looking after their own health and safety and that of others affected by their College-related work and leisure activities. To this end, everyone must:

- a. Comply with all local and College policies, procedures and codes of practice and with the arrangements which the College and department has in place to control health and safety risks.
- b. Ensure that their activities or behaviour do not present unnecessary or uncontrolled risks to themselves or to others.
- c. Attend and complete all appropriate induction and training.

- d. Report any accidents, unsafe circumstances or work-related ill health of which they become aware to the appropriate person (usually the Department Safety Officer).
- e. Not interfere with any equipment provided for Health and Safety reasons.
- f. Where an individual is not confident that he or she is competent to carry out a work or leisure activity safely, inform his or her supervisor or the person in charge of the activity rather than compromise his or her own safety or the safety of others.

DEPARTMENT SAFETY SHAREPOINT SITE

The Department operates an electronic safety registration and risk assessment system. It is based around an online resource for H+S using the Microsoft SharePoint platform. This system provides a single resource for safety management, including: risk assessment creation and final approval and laboratory safety information. Appendix 1 in this booklet provides a summary of the how you can access the system and complete a risk assessment. As taught students, you will only need to use this system for the research project element of your course where your work may include laboratory or fieldwork activities. Risk assessments will not be needed for desk or computer-based projects. Appropriate training in using this system will be provided when required.

DEPARTMENT SECURITY

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

ALWAYS wear your College Security/ID card whilst at College. Belt clips or neck lanyards are available from the department General Office.

DO NOT allow strangers to enter the building out of hours (deliberately or via tailgating)

NEVER lend your ID card to anybody, if they cause damage or present a risk to security or safety, YOU will be liable.

DEPARTMENTAL WORKING HOURS

The nature of the College is such that it appears to operate 24 hours per day - research never stops. Nevertheless, there are times of the day which the College considers are "outside normal hours" or access is limited and so special safety procedures including specific risk assessments and or lone working approval may be needed for your work to continue. In addition, there are times of the day when the College is "closed". The Department open and closed hours are as follows:

Normal opening hours:	8am – 6pm Monday to Friday
Swipe card access only:	7am – 8am & 7pm – 12am, Weekdays 7am- 12am Weekends and Public Holidays
College "Closed" (swipe inactive):	12am to 7am every day and during selected whole days during College Closure at Christmas.

Please make sure that you leave the Department before midnight. College Security patrol the buildings out of hours and any persons found on the premises will be removed from the building and have their access rights curtailed.

SAFE BEHAVIOUR IN THE DEPARTMENT

This is a large and busy building where many varied and potentially dangerous processes occur. You should always be careful when in the building, to ensure that you do not put yourself or others in way of harm. For example, be aware of people around you when walking down corridors, so that you do not obstruct them or inadvertently release a door into their path. All doors on the corridors are fire doors and have automatic closer devices fitted which cause the door to swing back, almost instantaneously, to the closed position. Please note that some of these doors (mainly on Level 5) have a delayed close and should not be forced to close – this will damage the closer device. Fire doors must never be propped open with a wedge or other heavy object.

Also, please note:

- **Keep to the Left** in corridors and on the stairs
- Do not run in the corridors.
- The wearing and use of roller blades, inline skates and the use of scooters in the building is forbidden. They are a hazard to other people and damage the floors.
- You must not enter any of the laboratories or workshops without prior permission.
- **Bicycles are not allowed** in the building – this is a College-wide policy. Bicycles must be stored in the racks provided on Campus.
- If you accidentally spill liquid in the corridors, please **wipe it up** – this minimises the risk to other people slipping on the spillage and hurting themselves.

LIQUID SPILLS IN THE BUILDING CORRIDORS

Please mop-up any liquid you see or spill in the corridors. These are major slip hazards and by ignoring the spill, you may cause somebody else to fall and suffer severe injuries.

WASTE DISPOSAL

There are very strict laws governing waste disposal. The College is proactive with regard to waste management and recycling, there are numerous recycling points around the building. Certain wastes generated in the department are separated for recycling/safety reasons. The following is a brief guide to the recycling and waste disposal mechanisms operating throughout the campus and applied within the department.

The College is striving to recycle as much of the waste it generates. One way to achieve this is by segregating waste at source. To achieve this the College has a number of different waste bins in use, which are colour-coded, each one designated for different wastes:

Waste domestic Glass (not broken glass):	Use the red-topped bins
Paper and Card (no paper cups or food wrappers):	Use the blue-topped bins
Cans and plastic bottles:	Use the green-topped bins
Non-recyclable waste:	Use the black-topped bins

Special arrangements exist for non-domestic, electronic and laboratory wastes:

Batteries a dedicated bin for batteries is located on level 2 (BOSS area) in the area near the photocopiers.

Chemical wastes

Any waste arising from laboratory activity which is contaminated or classified as hazardous (laboratory staff will advise you if you are unsure) must be disposed of in a controlled manner. Each Laboratory has special containers for segregating these wastes, including solvents, flammable waste, oils, corrosive materials, powders, etc. Please follow the guidance in each laboratory appropriate for the waste requiring disposal.



Clinical waste:

This category can cover many different wastes including syringe needles, used medical dressings and any bodily fluids. **Syringe needles in particular are a significant cause for concern** and must be handled with extra care and disposed of via a special “medical sharps” route. If you encounter or find anything which may fall into this category around the department, please contact the Department Safety Officer (DSO) **immediately**.

Electrical equipment:

Waste electrical equipment must not be disposed of via the non-recyclable waste route. Please contact the DSO for details of the procedures which exist for disposing of these materials.

Laboratory waste

Every laboratory has rules regarding the disposal of laboratory waste. You will be advised by laboratory staff what is expected in each laboratory.

Laboratory Glass:

The College operates special disposal systems for laboratory glassware which is contaminated or made from Pyrex – it **MUST NOT** be put into the red recycling bins in communal areas.

Toner cartridges

There is a bin on L2 (BOSS area) and L4 adjacent the lifts, dedicated to printer and toner cartridges.

If you have any doubts regarding the best way to dispose of a laboratory waste, ask the Laboratory staff, your Supervisor or the Department Safety Officer. Your risk assessment should specify all waste disposal procedures required for your work.

FIRE ESCAPE ROUTES

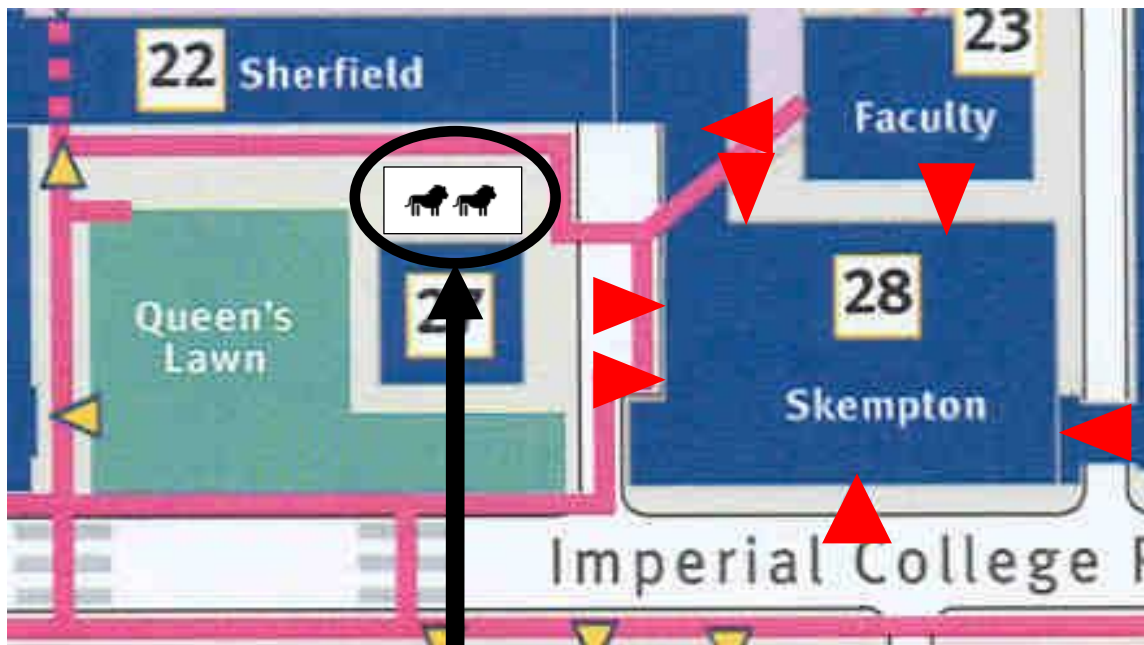
You **MUST** know which way is the quickest emergency escape route from your location in the building. All the emergency escape routes are indicated with an “arrow and running directional figure” green sign.

The evacuation alarm is a Claxon sounder with voice instructions.

If the alarm activates you must stop what you are doing and leave the building **IMMEDIATELY** by the nearest emergency escape route in an orderly manner, making sure that you close any doors behind you.

The Department has several means of escape in an emergency. The plan below shows the **Building Emergency Exit Points** and the **Emergency Assembly Point**.

Emergency exit locations and Assembly point for Skempton Building



The Department's assembly point is beside the Lion Statues at the base of the Queen's Tower

 = Emergency exit

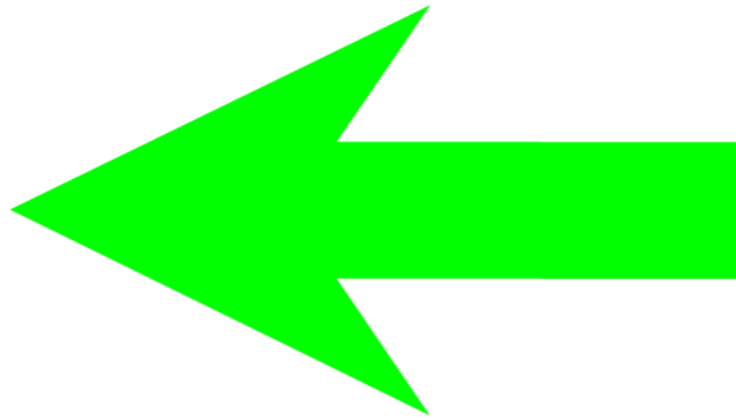
There are evacuation notices in every room in the building (please see the following image for an example) indicating with a green arrow the preferred exit route from that part of the building. Please follow the direction of these arrows when exiting the room because they

will ensure that we minimise congestion on emergency routes and hence you can evacuate from the building with the minimum of delay.

Emergency Procedures

For all Emergencies dial 4444

Direction of the nearest
escape route



The assembly point is adjacent
the base of the Queens Tower

For further details see the Department Safety notices

This notice must NOT be removed from this room

THERE ARE FOUR PRIMARY EXIT ROUTES FROM THE UPPER LEVELS OF THE SKEMPTON BUILDING

The East Stairs adjacent Mechanical Engineering/Unwin Road
The West Stairs which are part of Electrical Engineering
The Main (Central) Stairs beside the lifts, through reception
Through the BOSS area on Level 2 into the City and Guilds Building

THE EMERGENCY EVACUATION ASSEMBLY POINT IS BESIDE THE TWO LION STATUES AND THE STEPPED AREA ADJACENT THE BASE OF THE QUEENS TOWER

Please try to avoid using the main staircase during an emergency evacuation. The congestion on the Main Staircase can be significant and your evacuation will be much delayed.

All the corridors in the building must be kept clear. Do not put chairs or tables into corridors, as they reduce the width and cause an obstruction. Similarly, because all the doors in the Department corridors are fire doors, they must NEVER be propped open with wedges, fire extinguishers or by any other means.

**THERE WILL BE A FIRE DRILL DURING THE FIRST TERM,
TO FAMILIARISE YOU WITH EMERGENCY PROCEDURES**

FIRE PREVENTION & SAFETY

The consequences of a fire in any building can be several fold. Apart from the unacceptable loss of life which may result, there are the lesser consequences of damage to the building, the cessation of activities in the damaged area (or the whole building) and the loss of research and data in an Academic building. None of these outcomes are acceptable.

There is a responsibility upon all users of the building to ensure that fire prevention is a core part of all risk assessments and our day-to-day activities. The College has suffered several fires in recent years. The most serious occurred in the Department of Chemical Engineering and resulted in 3 laboratories being destroyed. The consequence of the lost research, equipment and data was very costly to the students and staff concerned, irrespective of the fiscal implication for the College and Department.

Current UK Fire Brigade policy is to not place fire fighters at risk, if there are no members of the public (College personnel) in the burning building. Thus, they could allow the building to be destroyed.

MICROWAVE OVEN SAFE USAGE

There have been several fire incidents in the Skempton Building, mostly caused by faulty electrical equipment. Most recently there have been fire alerts involving the communal Microwave Ovens. When using the microwave ovens, the instructions on the ovens must be followed. **Failure to use the ovens responsibly and safely may result in them being removed.**

- Follow the instructions on the front of the microwave oven
- Never microwave loose food – always place it in a container
- Only use “microwave oven safe” containers
- Do not use metallic containers or utensils in the microwave
- Loosen/open the lid on the container
- Do not leave food cooking unattended
- If food spills in the microwave, please clean it up.
- Report any problems with the microwave(s) to the Technical Services Manager (b.whiting@ic.ac.uk)

ACCIDENTS AND DANGEROUS OCCURRENCES

The College has a policy that ALL accidents or dangerous occurrences, however small, MUST be reported. This is because there is a very strict law with regard to reporting accidents to the authorities.

There is an online system “SALUS” available for reporting all accidents or dangerous occurrences. A dangerous occurrence is an incident that does not result in personal injury.

SALUS is accessible from the Safety department web page via a quick link:

<http://www.imperial.ac.uk/safety>

Typical accidents in the Department tend to occur due to “slips, trips, falls” and poor lifting practise. Many of the corridors in the Department are linoleum or terrazzo. When wet, the floors are slippery. **If you see a wet floor, or cause a floor to become wet**, for example by spilling coffee or tea, please do not walk away, **clear it up with paper towels** (these are available from the General Office).

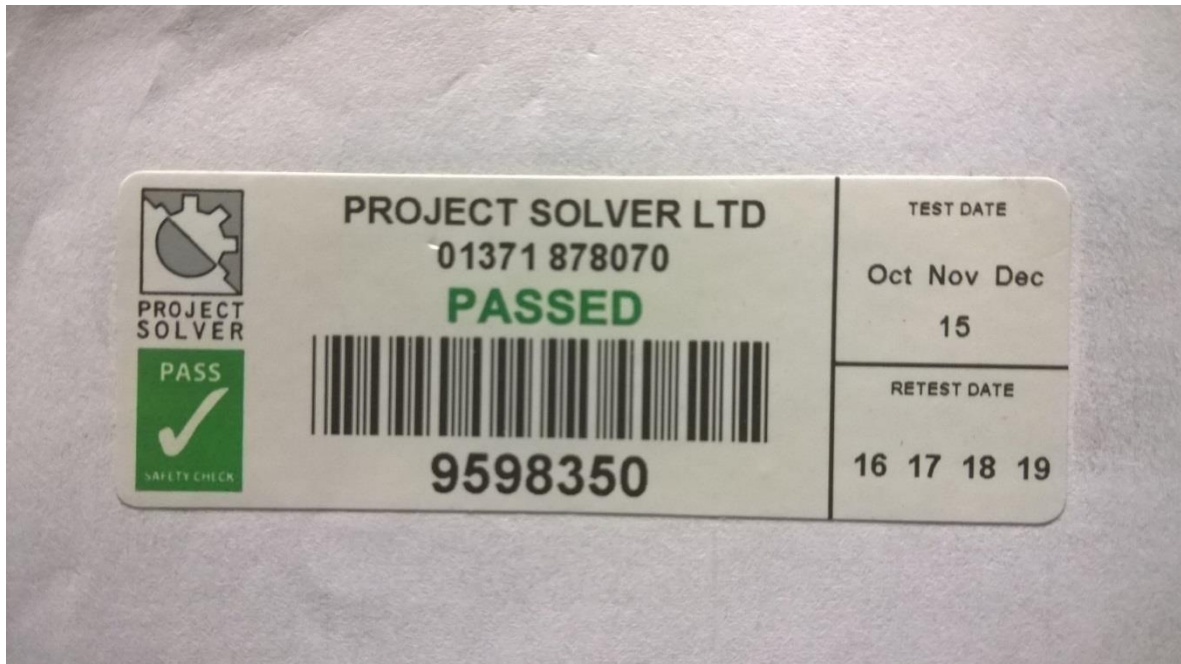
FIRST AID & LIFESAVERS

The College has a very well organised First Aid system. There are several qualified First Aiders working within the building. The offices of these staff are identified by the Universal first aid sign (a Green & White cross). If you feel unwell or need First Aid assistance please contact any of the staff identified on the list in the front of this book for assistance. In addition, most of the College Security staff are trained in First Aid and can be contacted by calling the College emergency number 4444 or 020 7589 1000. There are supplies of sticking-plasters and bandages available to treat minor injuries (cuts, scrapes and bumps). Any injuries which cannot be readily treated by a First-Aider must be looked at by the Health Centre, who may decide that hospital treatment is necessary.

ELECTRICAL EQUIPMENT

The Department has a **very strict policy regarding mains-powered portable and desk-based electrical equipment** brought onto the premises. This is detailed below. The key aspect of this policy requires that any electrical equipment in the building must be either new or safety tested prior to use. The periodic testing of electrical equipment in the Department is undertaken by external contractors. Thus, unless your electrical equipment meets any of the conditions below, you are **NOT PERMITTED** to plug it into the department electrical 240V sockets.

All equipment which has been tested and passed the electrical safety test will have attached a green sticker indicating that it may be used in the department (see image following). Any equipment not displaying this sticker or meeting the exceptions criteria described below the image, will be confiscated.



New equipment brought into the Department

New equipment brought into the Department may be used for the first year without the need for a Portable Appliance Test (PAT). The user is asked to perform a simple visual check on all equipment prior to use. Records of the equipment purchase, usually through the College finance system or a receipt from the supplier, must be kept to be able to prove the date of purchase. It must also be marked with a European CE mark or an otherwise equivalent international directive.

Personal electrical equipment brought into the Department

Personal electrical equipment brought into the Department will be PAT tested as Departmental equipment. To ensure that personal electrical equipment is tested within an acceptable timeframe (limit of one year of safe usage), only new personal equipment may be brought into the Department. Proof of date of purchase will be required. **Under no circumstances may old equipment be brought into the Department.** If old equipment is found then it will be confiscated and may be destroyed. The exception to the above is personal mains chargers for devices such as laptops, tablets and phones, etc. for which there is no age restriction.

Unauthorised electrical equipment

The list below gives some examples of unauthorised electrical equipment which must not be brought into the Department:

- Electric fires and heaters of any form
- Any form of equipment used for cooking or warming food (kettles, toasters etc.)
- International equipment which is not compatible with the UK mains voltage (220-240V)

- International equipment which is not marked with either the European CE mark or an equivalent international standard.

Electrical equipment belonging to visitors

Electrical equipment belonging to visitors and brought into the Department will be subjected to the normal Departmental rules.

Electrical equipment belonging to third parties

Electrical equipment belonging to third parties, such as contractors working within the Department, are the responsibility of the third party who will be required to demonstrate that their policies and procedure are at least in accordance with and of a standard compatible to those of the Department.

Design, construction, checking and testing of electrical equipment

Those involved in the design and construction of electrical equipment will be required to ensure that such equipment is suitably tested to ensure that it performs within the general conditions of the Departments “Electrical Equipment – Policy and Code of Practice”.

Repair, installation or modification of electrical equipment

Unless otherwise directed, staff and students in the Department are not allowed to undertake any repair, installation or modification to electrical equipment.

Disposal of electrical and electronic equipment

Consult the Facilities Management web pages to arrange for the collection and disposal of unwanted College Equipment (there may be a charge for this service).

<http://www.imperial.ac.uk/estates-facilities/buildings/services/waste-disposal/waste-disposal-forms/weee-forms/>

LABORATORY COURSES

There may be several occasions when you will undertake laboratory work as part of your course. The Department is very unusual within the College in that it operates all major classes of laboratories with many diverse activities, which include the traditional mechanical and engineering testing through to specialised chemical and biological work. Each laboratory has their own specific safety procedures which will be explained in detail before any work commences, you **MUST** abide by the following general rules for any laboratory behaviour/work.

Work in any laboratory must only be conducted during normal College hours (9am-6pm), with at least one other person in sight at all times. Lone laboratory working is **NEVER PERMITTED**. Additionally, the other person in the laboratory **must know the College emergency procedures and be familiar with the working environment** so that if they

need to isolate a service or make safe an experiment in an emergency, they know what to do.

Laboratory “Do and Do not”

DO

Follow all instructions from the demonstrators/lab staff
Wear all necessary personal protective equipment, especially your safety glasses, at all times in all laboratories
Tie back long hair
Wear appropriate clothing and stout shoes or safety boots, as required.

DO NOT

Wear long/dangly clothing or jewellery which may become snagged in moving machinery
Wear sandals or open-toed shoes
Run or fool about in the laboratories
Eat or drink in ANY laboratory

RISK ASSESSMENTS

Risk assessment is the cornerstone of Health and Safety management. No activity should be started before a risk assessment has been completed. To be able to perform a risk assessment you need to know what you are going to do and have an understanding of the steps and processes required in the task being assessed. If all the information is at hand, the assessment should be a straightforward task. If the risks are considered to be too high, this does not mean that the activity cannot be completed but it may mean that a different approach or better control measures are required to reduce the potential risks.

For most laboratory classes, the assessment will have been undertaken by the course or laboratory organiser. They will explain the assessment to you and indicate the main risks from the work to be conducted and advise you how to avoid these risks. However, some laboratory or fieldwork classes will require you to complete your own assessment (particularly for project work). The Department has standard online forms for this purpose, accessed via the SharePoint site mentioned earlier. Guidance on the completion of these forms will be provided in special introductory sessions prior to you undertaking the projects requiring assessments.

When completing risk assessments, if you need further information or require advice, you must ask the staff supporting your work (Academic or Technical). If they cannot provide the necessary answer or information, please do not hesitate to ask the DSO.

FIELD COURSES

During the time of your studies within the Department of Civil and Environmental Engineering, there are several major courses of varying duration that require you leave the

Department and College premises. Whilst away from these premises, your Health and Safety is still our responsibility. We take this responsibility very seriously. The College is covered for most events by its insurance (see: <https://www.imperial.ac.uk/finance/financial-services/insurance/> for detailed information about the College's insurance policy and its provisions), but there is an important onus (and a legal responsibility) upon you to abide by College Health and Safety rules. Every field course has its own specific set of instructions which detail the risks and methods for minimising these. Copies of these instructions will be given to you prior to your undertaking of the course. The following information is meant as a general benchmark for you to use and apply at all times when away for course purposes.

The course leader or coordinator must provide you with course details and risk assessments before commencing the field work activity. If you do not receive this information, ask the coordinator for it. Undergraduate **MEng Students must take the supplied PPE on all the field courses**. Failure to do this will result in you being refused participation in the course which may mean you fail that element and hence the year.

When we organise any field course, the course co-ordinator carefully considers all the potential risks that may occur and are attributable to the particular situation. For example a visit to a quarry has particular dangers which are different to a visit to a bridge or road, but there are several common risks which can be controlled and minimised if not entirely eliminated by applying several basic rules.

- 1 Whilst on any field course, the most important rule is that you **MUST** follow the instructions of the course leader. Pay particular attention to guidance on safe practices whilst on that trip.
- 2 Do not try to take too much luggage with you, heavy bags can be difficult to carry and cause back strain, as well as being a potential danger if they fall from luggage racks in buses.
- 3 Ensure that you are suitably dressed for the trip or course i.e.: a hard hat, warm and waterproof clothing and stout shoes would be a minimum requirement for a winter visit to a site – forget fashion!
- 4 Take particular care when crossing roads checking in both directions for traffic before crossing. When walking alongside roads not designed for pedestrians try to stay at least 1m from the traffic at all times.
- 5 Make sure that you inform the course leader of any medication which you use or any ailment which you suffer from that may be a problem during the course. For example if you are a diabetic or have food allergies, it is vital that the course leader of a residential trip is aware of this in advance for dietary purposes or in case you require medical assistance on the course. Ensure that you are carrying sufficient medication for the duration of your course. A less obvious condition, but equally dangerous would be if you suffer from vertigo and visits to a bridge or tall building may be a problem or conversely, claustrophobia would be an issue for a visit to sewers.
- 6 Be aware of problems like dehydration and sunburn which may occur on summer field trips.

- 7 Any accident or dangerous occurrence, however minor, must be reported immediately to the course leader.
- 8 The evenings of residential courses may seem like a ideal opportunity to relax and have fun, but alcohol abuse can be dangerous and antisocial behaviour resulting from this will **NOT BE** tolerated.
- 9 You are representing Imperial College whilst on the course. Any public nuisance or criminal prosecution resulting from disreputable behaviour whilst on the course will be your liability and not the College's. For example, some sites are classified as SSI's (Special Scientific Interest), damaging them by even walking across them can result in prosecution.
10. Visits to sewers, building sites or other outdoor environments may expose you to pathogens such as Tetanus or Leptospirosis (Weil's Disease). The course of study in the Department has several components which involve field work and visits to active construction sites. The nature of the activities and locations of these sites means that there is an enhanced risk of injury (a deep cut) whilst undertaking the field courses and hence tetanus infection may result through contact with soil if you are injured. It is normal practise in the UK for children to receive a full course of tetanus immunisation injections whilst growing up (5 injections in total). Thus, you must be able to prove that you have received these injections. If you have not had them, you need to be aware of this and should consider having the necessary immunisation programme to ensure that you have up-to-date tetanus protection prior to starting the field-based activities. It is a requirement for the course that your tetanus jab is kept up to date. It is usually valid for 10 years.

Weil's disease is an often overlooked risk. The text box below explains how it can be caught, precautions to take to minimise the risk and the disease's symptoms to be aware of.

Leptospirosis or “Weil’s Disease”

Leptospirosis is spread in the urine of infected animals – most commonly rats, mice, cows, pigs and dogs.

You can catch it if:

- **soil or freshwater (such as from a river, canal or lake) containing infected pee gets in your mouth, eyes or a cut** – usually during activities like kayaking, outdoor swimming or fishing
- **you touch an infected animal's blood or flesh** – usually from working with animals or animal parts. It's very rare to get leptospirosis from pets, other people or bites

Precautions against the risk of infection by Leptospirosis:

After working in contact with sewage of anything which might have been contaminated by it, wash your hands and forearms thoroughly with soap and water. If your clothes or footwear are contaminated with sewage, wash thoroughly after handling them. It is particularly important to do this before eating any food or drink. Wet protective clothing should be dried as soon as possible.

Infection may enter through breaks in the skin, so thorough first aid treatment of all wounds is important. Take particular care to wash thoroughly any cut, scratch or abrasion of the skin as soon as possible, whether the injury was caused at work or not. Apply an antiseptic to the wound with a clean piece of cloth or cotton wool and protect it with a strip of gauze completely covered until it is quite healed. Antiseptic gauze and impermeable plaster are available from first aiders.

If you suffer any cut, scratch or abrasion of the skin, it must be covered with a waterproof plaster before entering a place of work.

Avoid rubbing your nose or mouth with your hands during work.

See a GP if you might have been exposed to infected pee and you have:

- a very high temperature, or feel hot and shivery
- a headache
- feeling and being sick
- aching muscles and joints
- red eyes
- loss of appetite

These are symptoms of leptospirosis.

Ask for an urgent appointment if you have:

- yellow skin and eyes ([jaundice](#))
- swollen ankles, feet or hands
- chest pain
- shortness of breath
- coughing up blood

Visits Abroad

Trips outside the UK are a feature of some of the courses. However, depending on the reason for your trip abroad, the College's insurance may not provide full cover in all eventualities (i.e. terrorism and war zones). There may be particular risks which must be considered alongside the normal risks discussed above.

The most obvious hazards are from disease, both insect and water-borne, which will generally be regional specific i.e. tropical climates – Malaria, so advice on the required vaccinations will be needed. The availability of clean drinking water cannot be overlooked.

There may also be hazards due to wildlife, for example, predators such as large cats, venomous creatures (snakes, spiders, fish etc.), Sharks, Polar Bears and so forth.

Despite the growth of global communications, some parts of the world do not have very comprehensive satellite or mobile phone coverage, so communications with other part of the country or globe may be limited. In addition, battery life on mobile telephones must be carefully managed as you cannot guarantee to be able to find a suitable electrical supply to boost your telephone's charge

A further factor to consider is the political stability of the country you will be visiting. The risk of kidnap is a real threat in some countries. It is advisable to register with your national Embassy when you arrive in a foreign country, so that they know you are there. There are some countries around the world where organised society has broken down or is badly eroded due to Civil war or natural disasters. There must be very compelling reasons to travel to countries with these particular problems and comprehensive risk assessments will be required. In addition, approval for trips to countries which fall into this category will need to be given by the Head of Department. Your supervisor or course leader should make all the necessary arrangements to cover your trip. This includes activating the College insurance, which is a comprehensive policy. Nevertheless, it is very important to recognise that **no travel insurance** is truly and fully comprehensive. There are limits to what an insurance company can do to recover you from danger or protect you from harm. [International Rescue (“Thunderbirds”) **do not** exist].

There are several sources of information relevant to trips abroad:

The UK Foreign & Commonwealth Office web pages contain all the information to help make your trips as safe and enjoyable as possible: <http://www.fco.gov.uk/>. Follow the links for “travel advice”.

The USA Government's CIA “World Fact Book” also contains a large amount of details on every country recognised by the USA Government:
<http://www.cia.gov/cia/publications/factbook/>

IMPORTANT

The College Insurance Policy is NOT VALID if you take personal holiday whilst away for College purposes. YOU MUST ensure that you have separate, personal travel insurance for recreational activities, holidays and non-College related travel whilst away.

If you need to undertake international trips for projects etc., please plan ahead. Discuss the project needs with your supervisors and the DSO, as required and submit the risk assessment form at least 3 weeks before you intend to travel.

College Occupational Health will provide advice on travel medication, injections etc., and will also undertake immunisation injections for College-required trips. However, you must arrange these well in advance of your trip (ideally, at least 1 month before travel).

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment, (PPE) is an essential part of Civil Engineering site safety. In recognition of this PPE is an essential requirement for the field courses run by the department.

All **first year undergraduate (MEng) students** will be issued with a personal safety pack after Christmas, just prior to the commencement of their first field trip. This safety equipment **must kept safe and looked after** because the items will be needed throughout the four year MEng degree. If you lose any items you will be charged for replacements. If you do not bring them to your course when required, you will not be permitted to undertake the module and may fail the course as a result.

The safety pack will comprise the following items:

Hard Hat
Safety Glasses
Site Gloves
High-Vis Vest.

Hard Hat

British Standard Hard Hats must be thrown away after 4 years, as their safety performance cannot be guaranteed after this time. MSc students will be issued with hard hats during field courses and other times as required, but these **must** be returned to the Department. The Department issues Hard Hats as part of the safety pack above for all undergraduate students in the Department. The Hats will be needed for most field courses over the 4 year course and must be looked after.

Safety Glasses

MSc students will be issued with safety glasses as required for laboratory and field courses. These are issued as part of the safety pack to the undergraduate students. Safety Glasses are required for all laboratory courses and most field courses. If you do not have a pair of safety glasses, you will be **unable** to undertake the course.

Gloves

Increasing concerns over dermatitis (from cement) and cuts and grazes from construction site activity has seen the compulsory wearing of gloves on all construction sites. A pair of cotton gloves suitable for site are included in the safety pack issued to the undergraduate students and these are needed for all site visits. MSc Students will be issued with a suitable type of glove for laboratory and fieldwork courses.

High-Vis Vests

Site visibility is a key part of safety management, hence all site visits require the wearing of high-vis vests or jackets. A high-vis jacket forms part of the Safety Pack, for UG students whilst MSc students will be issued with them as required.

Safety Boots

All undergraduates and some MSc students (Check your course information) must own a pair of safety boots. The footwear needs to be classified as complying with EN ISO 20345-S3, which provides the highest level of impact resistance in the toe area and be fitted with a steel mid-sole with steel toe caps and offer ankle support.

Not only are safety boots essential for any visits to construction sites, but some laboratories within the Department require that they be worn at all times and they are needed for the Surveying, Geology and Constructionarium field trips during the 1st and 2nd years of the MEng degree respectively.

The Department will be arranging for a specialist supplier to attend the Skempton Building during the first term to sell these boots (check your course information for more details). The wearing of safety boots is compulsory during certain courses and failure to abide by this rule will result in you being barred from the course and possibly failing that module (and hence the year). Safety boots can be readily purchased from many high-street suppliers, but these must meet the minimum requirement described above.

Some MSc courses will issue the safety equipment as the class need arises, but this must be returned to the Department at the end of the class.

WEB RESOURCES FOR HEALTH AND SAFETY AT THE COLLEGE

The College Intranet, which is accessible for all College networked PC's, has comprehensive health and safety information covering most aspects of the activities undertaken by the College. This information can be readily accessed from either the Safety Department or the Occupational Health web pages, which can be reached under the "A-Z" tab (admin and Services) on the right-hand side of the College main menu bar of the Home Page.

Some of this information is protected and you will need your College username and system password to view all the information contained within. You can access SALUS for reporting accidents and dangerous occurrences (as described above) from this site, plus view the College policy on health and safety and guidance on many aspects of safety.

COMPUTER USE

The Department is particularly well equipped with open access computing laboratories on levels 2 and 3 that are used for teaching as well as research purposes. However, it is becoming increasingly common for people who use computers or "display screen equipment" (DSE) for long hours to start to suffer from eye and skeletal/musculature

problems, particularly if you use a laptop rather than a “fixed” desk computer. This may result in eye strain, back, neck and shoulder pain, problems with wrist and arm joints. The College has produced detailed guidance on ways of minimising/eliminating potential problems from DSE use. A copy of this information sheet is appended to this booklet. Please read and apply this information, it may save you much discomfort later in life.

If you undertake a project which involves long hours of computer use then you should follow the guidance below and undertake a DSE assessment of the workstation you are using. The “Computer Health & Safety Checklist” (DSE assessment) form is available to download from the following link:

<https://www.imperial.ac.uk/occupational-health/health-protection-at-work/computer-health/>

Computer Use – Healthy Working

All members of the college community use computers to a greater or lesser extent. You should undertake a simple DSE assessment of the workstation you are using.

It is becoming increasingly common for people who use computers or “display screen equipment” (DSE) for long hours to start to suffer from eye and skeletal/musculature problems, particularly if you use a laptop rather than a “fixed” desk computer. This may result in eye strain, back, neck and shoulder pain, problems with wrist and arm joints. This is called “Cumulative Trauma Disorder”. The set-up of your computer workstation is very important. A poor set-up may cause the above health issues. If you start to suffer from any of the above symptoms from using computers, you must contact the departmental Display Screen Assessor (Dr Fowler) for any questions or concerns you have with regard to healthy computer usage.

The following guidance will help you in minimising the likelihood of the symptoms developing indicative of Cumulative Trauma Disorder.

Staying Healthy With Your Computer

Avoiding Cumulative Trauma Disorder

Computers can damage your health. Every year we see several cases of Cumulative Trauma Disorder (CTD) formerly called RSI or Repetition Strain Injury in staff & students and the problem is becoming more common. Avoid it happening to you by taking care to organise your work-station and organise your time spent using a computer both at work *and at home*.

Follow these simple rules & find that your computer can work for you without causing harm.

Take Breaks - The Key Issues

1. Intersperse with other work (take note laptop users!): phone calls, writing/reading work, filing, proof reading, photocopying, talking with colleagues. Even coffee breaks!
2. Five minute break every hour & don't spend a whole day on computer-based activities (applies equally to work at home). Web Surfing, updating Facebook, Blogging or Online gaming do not count as a break!

Keep Your Desk Tidy

Avoid cluttering it up with books, papers etc. Make sure you have enough clear space to operate your mouse easily & to access your keyboard. Keep most frequently used items close to hand to avoid stretching.

Adjust Your Computing Equipment to Suit You

1. Set your screen to a comfortable height, usually with the top just below eye level, so you do not have to stretch your neck. Avoiding any twist in your spine, sit face-on to your screen.
2. Ensure sufficient room to rest your hands in front of keyboard when not keying. Interchange position of keyboard and mouse depending on data input device predominantly in use at the time.
3. Adjust your seat height so your arms are horizontal to the keyboard and avoid flexing/extending wrists. If you use a laptop, work with it on a table, never on your lap.
4. Ensure room for your feet to rest under your desk. A footrest may be beneficial for small people.

Get Comfortable

Make use of the illustrations below to see whether you've organised your desk and your work to avoid unnecessary problems. *The rules for desktop users apply to work with laptops; whenever possible the same advice should be followed.*

Don't ruin your work by poor practice. Be organised, be sensible with your work-time & be successful— without damaging your health.

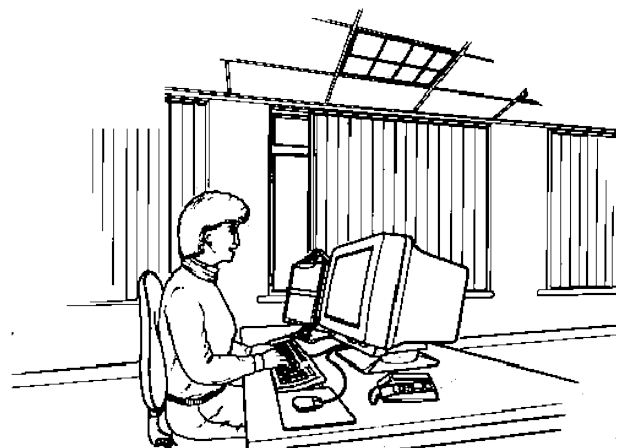


The ideal working posture.

Forearms at keyboard height and eyes level with top of screen.

Chair adjusts to provide back support and feet securely rested (in this case by use of a footrest).

Use this as a guide to finding a comfortable working posture for yourself.



An ideal work station arrangement.

Desk uncluttered, space for documents etc.

If needed and to rest hands when not typing.

Screen positioned to avoid reflections from light coming in from the window or the fluorescent light tubes.

1. Adjust the seat height & back tilt/height to fit you. Twisted or cramped posture to be avoided.
2. If you are copying documents, use a document holder.
3. Sit back when you are thinking, rather than staying hunched over your screen.
4. Use a soft touch when keying and avoid flexing your wrists. Try to adopt a neutral position. If possible, learn how to use short cut keys and touch typing.
5. Give your eyes a comfort break too. Look away from your screen or close your eyes when thinking. Avoid staring at the screen & throw in a few extra blinks as natural blink reflexes are often unconsciously suppressed.

DON'T IGNORE SYMPTOMS

If your arms or shoulders start aching/tingling, follow steps below.

1. Take a break & re-organise work to give yourself more breaks in future.
2. If symptoms persist or keep recurring, contact your occupational health (OH) service for help.

Make Use of the Experts

1. All College departments should have a DSE (Display Screen Equipment) Assessor who knows about computer ergonomics & can help you check your workstation. They'll help you with the computer checklist if you don't feel confident to complete it yourself. Also if you identify problems through the checklist which you can't solve yourself or which may affect your or other's safety.
2. Your local OH service can assess and advise on CTD problems.
3. Students can arrange vision screening with the OH service.

Personal Safety for Laptop Users

1. Do not endanger your health by carrying too heavy a total load with the addition of your laptop.
2. Take precautions to avoid theft while your laptop is in transit and check your insurance cover. Your personal safety is more important than loss of your laptop.

Dr G. D. Fowler
Departmental Safety Officer
September 2022

Appendix 1: A quick guide to using the Department SharePoint Safety Site

Imperial College
London



An Introduction to using the SharePoint Site

*Dr Geoff Fowler
Departmental Safety Officer*

Risk Assessments

- All research activities undertaken in the College MUST have a risk assessment.
- Risk assessments MUST be done BEFORE the work starts.
- All the necessary forms and processes are available via a SharePoint system.
- Academic Supervisors must approve the assessment and electronically sign it off.
- Secondary Checker also approves (Lab manager or DSO)

The SharePoint Site

- An automated system to enable the creation of risk assessments and manage their approval and archiving
- Accessible from any Networked PC or VPN connection – use College ID and Logon
- Works with most internet browsers. It does not work in Linux

The SharePoint site allows you to attach extra information linked to your General Risk Assessment:

- COSHH Assessment
- Computer use (DSE)
- Fieldwork Risk Assessment
- These separate Word forms are all on Blackboard & SharePoint for download

Risk Assessment – A Step-by-Step guide

- Log onto SharePoint:

<https://imperiallondon.sharepoint.com/sites/foe/CivilEng/HealthandSafety/default.aspx>

- The Microsoft SharePoint logon page may open first, asking for your College username ("USERNAME"@ic.ac.uk). Enter your details and then you will be transferred to the Imperial College SharePoint logon page. Enter your College Password and then:
-
- The Department H&S SharePoint site will open

Use Explorer v10, Firefox or Chrome. It does not work in Linux or Explorer v11

Logging on to SharePoint – Initial 365 sign in



Logging into SharePoint – Imperial 365 site



Department SharePoint Site



Using the Site

- 1st step: Complete a General Risk assessment:
 - This covers many activities, but occasionally you will need to use special forms for certain tasks (COSHH, Fieldwork, Biological work)
 - You need to identify all the risks and quantify them
 - Attach extra information including Engineering/experimental designs, SOPs etc.
- 2nd Step: submit your form(s) for approval:
 - Approvers may include: Your Supervisor, the Laboratory Manager, A qualified 2nd engineering academic (for Structures), the HoD (for hazardous fieldwork) & the DSO.
- 3rd Step: Forms are assessed and approved (or rejected) by your Supervisor & Lab Manager

SharePoint General Risk Assessment How to complete the form (1) Starting the form & selecting the assessors

The screenshot shows the SharePoint interface for the 'General Risk Assessment' form. The form is titled 'General Risk Assessment' and is part of the 'Imperial College London Faculty of Engineering' system. The form includes several sections: 'Department', 'Title of Activity or Subject', 'Date', 'Site', 'Building', 'Room', 'Assessor', 'Supervisor', 'Department', and 'Full Description of the Activity'. Red arrows point to these fields with explanatory text:

- Department:** Enter all requested information. Blank spaces or unanswered questions will prevent the form from being submitted for approval.
- Title of Activity or Subject:** Enter the title of the project and put your initials (in brackets) at the end to create a unique file reference. This entry becomes the file name.
- Date:** Provide a brief description of the planned work. Enough detail for the reviewers to know what the project is about, but do not provide details on methods or risks. Attach method files, COSHH assessment etc. & complete the risk matrix below.
- Assessor:** Your name
- Supervisor:** Your Supervisor
- Department:** Lab Manager or DSO
- Full Description of the Activity:** Ticking this box allows for an extra assessor to be included (useful for complex assessments, hazardous fieldwork where a Specialist assessment is required e.g HoD etc.)

SharePoint General Risk Assessment

How to complete the form (2)

Lone Working & Hazard identification

Lone Working

Will anyone carry out the activity **without** close or direct supervision or contact with others? That is, unable to be seen or heard by anyone? (Don't include people like cleaners or contractors who are covered by other safety arrangements such as work permits.)

Hazards, Harm and Controls

RECOGNISE
List all the hazards present and harm they might cause, and estimate the **severity** (S) of the harm and **probability** (P) of it happening (no safety control measures were in place. This is the "Raw Risk"). Then list the controls that are in place (including any new or previous training) and estimate any reduction in the severity or the probability. This will give a "Residual Risk" level.

IMPORTANT NOTE: PLEASE LOOK AT THESE FIRST: **TRIP/HAZARD - SLIP RISK**

Some hazards may need separate and more detailed assessment. Tick any that apply below for guidance on this. When they are completed, please attach them in the "Supporting Documents" section below.

- Facilities, including steps
- Biological materials
- Substances hazardous to health (chemicals, etc.)
- Manual handling activities
- Compressed gases and cryogenics
- Ladders
- Display screen equipment
- Process water systems, especially generating sprays and aerosols
- Any off site working
- Significant noise levels
- Machinery

Lone working is a significant issue of concern for the College. This section must be completed accurately & honestly

Complete **all** the sections. Any unanswered parts will prevent submission of the form.

Read the guidance & advice to understand what is needed here.

Use these options to help identify hazards. Ticking a box opens a guidance section with links to a specific specialist risk assessment forms. The specialist forms (COSHH, Fieldwork etc.) must be completed too and attached to this form for submission and approval as part of this risk assessment process.

SharePoint General Risk Assessment

How to complete the form (3)

Risk assessment

Hazards, Harm and Controls

RECOGNISE
List all the hazards present and harm they might cause, and estimate the **severity** (S) of the harm and **probability** (P) of it happening if no safety control measures were in place. This is the "Raw Risk". Then list the controls that are in place (including any new or previous training) and estimate any reduction in the severity or the probability. This will give a "Residual Risk" level.

IMPORTANT NOTE: PLEASE LOOK AT THESE FIRST: **TRIP/HAZARD - SLIP RISK**

Some hazards may need separate and more detailed assessment. Tick any that apply below for guidance on this. When they are completed, please attach them in the "Supporting Documents" section below.

Identify the hazard	Estimate the severity (S)	Estimate the probability (P)	Raw Risk (S x P)	Describe the existing control measures	Estimate the severity (S)	Estimate the probability (P)	Residual Risk (S x P)

WARNING: If any of the Residual Risks show **RED** then the activity or equipment must be stopped immediately. It should then be altered before re-assessment - discuss the changes with a Department or College Safety Officer.

Supporting Documents

Attach supporting documents, such as other risk assessments for the activity, operating procedures, instructions, diagrams, pictures, etc., here:

Click here to attach files

Click here to attach files

Raw risk: Probability is always 4 Severity is selectable (1-4)

Use the help box to understand what severity and probability mean and the difference between each numerical value (1-4).

Identify each hazard on a separate line (lines can be added using the "insert another hazard box")

Attach all supporting documents here. These can include: COSHH forms, Fieldwork Forms, method descriptions, Bio1 approval forms, experiment design notes and other supporting documents.

Residual risk: Probability should have reduced Severity is unlikely to change

Do not leave an empty line in this table - it will prevent the form from being submitted

SharePoint General Risk Assessment How to complete the form (4). Completion and Submission

Additional Safety Control Measures

REMARKS:
The "Red/Amber/High" levels from the above sections are an indication of whether more controls are needed. If not captured, then additional controls are probably necessary. But, if yellow (medium risk) or low (low risk) or red (very high risk) then additional controls should be considered. You may wish to discuss what they should be with your supervisor or a safety officer. It is rarely always possible to reduce the probability (likelihood) but it is always possible to reduce the severity.

Are additional safety controls needed? YES NO

Emergency Procedures

Your assessment must include a check that controls are in place to handle any emergencies. Please answer the following questions:

Do the personnel know what to do if the equipment, machine or equipment suffers a dangerous failure? YES NO N/A

Do the personnel know how to clean up and dispose of hazardous waste - from spills on the activity itself? YES NO N/A

Do the personnel know how to evacuate the area, and are emergency evacuation procedures displayed nearby? YES NO

Do the personnel know what the first aid arrangements are for the area? YES NO

Review of the Risk Assessment

This risk assessment requires a periodic review. How often depends upon the risk level. If high, a short review interval is necessary, but if low a longer interval would be appropriate. **HOWEVER, it must be reviewed immediately if changes are made to the activity or location, following a near miss or accident, if new knowledge about the hazards is discovered or if the legislation changes.** As part of your assessment, set the review interval below.

This assessment needs a routine review every months.

Annotations:

- Answer all these questions. Use the risk analysis outputs to ensure that you do not overlook any required measures.
- Select a review period longer than the planned length of the project. If the assessment is for a 3 month MSc project, pick at least 6 months as the review period etc.
- You do not need to complete the form in a "single sitting". You can save the form at any time and return to it later.
- This box will remain unavailable until you have completed all the required sections/boxes.
- Once you have completed the form and are happy with the content. You should submit it and await the assessors' opinion. Hopefully, they will approve it. If they do not, you should receive feedback on the rejection email stating what improvements are required. You will need to make the changes are resubmit the form.
- You CANNOT start work until the form has been approved.

The SharePoint site allows you to attach extra information linked to your General Risk Assessment:

- **COSHH Assessment (Dept specific form)**
 - Legally required for any work involving harmful substances: Acids, glues, gases, solder, flux, dyes, etc
- **BIO1 form**
 - College requirement for any work involving biological agents. Any Biological work **MUST** be discussed with the DSO before you do any preparation work
- **Fieldwork Risk Assessment (FW1)**
- Each of these forms are separate **WORD** documents available through SharePoint

5 Steps for undertaking a risk assessment

- Step 1: Identify the hazards
- Step 2: Decide who might be harmed and how
- Step 3: Evaluate the risks and decide on precautions
- Step 4: Record your findings and implement them
- Step 5: Review your assessment and update if necessary

Hazard & Risk Defined

- HAZARD: anything that may cause harm, such as chemicals, electricity, working from ladders, an open drawer etc;
- RISK: the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be.

Lone Working

- There must be at least one other person in a laboratory with you outside of normal hours.
- That person must know what to do in an emergency (A “BUDDY”).
 - How to stop the experiment
 - Emergency procedures
 - Who to call
- The best way to avoid lone working concerns is to plan your work

Research Specific Training

- It is essential that you know how to perform your research competently and safely.
- You are forbidden to use any item of Laboratory equipment or undertake a procedure until you have been appropriately trained
- If you have any doubts or concerns about the equipment or methods, even after training, then you must ask for more instruction.
- Failure to do this may result in harm to you, your colleagues and/or the equipment.
- This may result in prosecution of the College, your Supervisor and you.

FINALLY...

- If in doubt about any safety issue, ALWAYS ask somebody:
 1. Your Supervisor
 2. Laboratory Staff
 3. Department Safety Officer

If you have any questions about using the SharePoint Site, need assistance to complete a risk assessment or have any other safety-related questions, please contact the department Safety Officer:

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