

Department of Materials
Imperial College London

G.03, Royal School of Mines
South Kensington Campus,
London SW7 2BP, UK
Tel: +44 (0)20 7594 6728
Fax: +44 (0)20 7594 6729

www.imperial.ac.uk/materials

Dear Student,

While coronavirus (COVID-19) is causing huge disruption to people's lives around the globe, I want to reassure you that we're more committed than ever to your future at Imperial.

We understand the current situation may be difficult for you, with school closures and the uncertainty regarding calculated grades, as well as the difficulties of motivating yourself to continue to study at home.

We know how you may be feeling, which is why we want to help you to have the best start at Imperial as possible. That's why I'm writing to you, to offer you our assistance with completing your current courses and to suggest how you can best prepare for starting your Materials Science and Engineering degree with us.

What you need to do now

Keep going: We want you to keep going with your studies. We know it's hard right now but completing your course syllabuses is important.

Our degree courses build on the knowledge you have gained from A Level/Baccalaureate subjects. We want you to be successful at Imperial and that means mastering the content of your syllabus.

How we can help you

Don't worry: You may be concerned that the period between now and October is a long time to be away from mathematics and science-related work, especially since you might not be revising and mastering techniques for your exams. We want to reassure that you will quickly find a rhythm of work when you start university.

Imperial's COVID-19 response



We are proud of our colleagues who are playing a leading role in the global effort to [respond to the coronavirus \(COVID-19\)](#) outbreak.

Staff and students are introducing new initiatives and undertaking vital research that's helping to find solutions and save lives.

You can read more about Imperial's research and developments on our [News website](#), follow us on social media, or sign up for our [daily news bulletin](#).

Here are some **suggestions** and resources that are **freely** available to help you in preparing for your Materials Science and Engineering course, starting with us in October.

Mathematics

As Mathematics is a core requirement for our courses, it is important that you master topics such as vectors, calculus and mechanics among others.

Free courses: Imperial offers four A Level Mathematics online courses that are freely available on the website at this address: <https://www.edx.org>.

How to access the courses:

1. You will need to create a free account in order to access the course.
2. To find the course, click the Search/Explore Courses bar and type in 'A Level Mathematics' then click 'See All Results':
 - The first Year 13 course is called: 'A-level Mathematics for Year 13 - Course 1: Functions, Sequences and Series, and Numerical Methods'.
 - There is also a second Year 13 course and two Year 12 courses on the website.
3. Click 'Enroll Now', to enrol on to the course. Please note, you do not need to sign up for the paid certificate version of the course via EdX. In order to avoid paying for the course, make sure you click the 'Audit this Course' option when you are enrolling.

For more help: We will make available a discussion forum where you will be able to ask questions and get clarifications from members of the Department (please use your UCAS contact email address when you register with EdX).

Physics and Chemistry

You will be taking at least one of these science courses for A Level/Baccalaureate and our course relies on concepts from both of them. The following online courses will either help in completing your current studies or ensuring you are best prepared for your course with us:

<https://www.coursera.org/learn/advanced-chemistry>
<https://www.edx.org/course/ap-physics-1-challenging-concepts>
<https://www.edx.org/course/ap-physics-2-challenging-concepts>

Please note that these are suggestions and we do not expect you to pay and enrol in these courses – we do not require a certificate of completion.

Other preparations

Software knowledge

You can also prepare by familiarising yourself with software like Excel, CAD and ImageJ – again, we do not expect you to pay for these as they are open source and you can find free tutorials readily available on the internet. Here are the web addresses:

<https://www.coursera.org/learn/excel-data-analysis>
<https://www.openscad.org/>
<https://imagej.net/Introduction>

Reading

Books you might like to read include *Stuff Matters* by Mark Miodownik, *Made to Measure: New Materials for the 21st Century* by Philip Ball and *The New Science of Strong Materials* by JE Gordon. They explore Materials Science and can be informative.

Videos to watch

We would recommend these videos on the internet:

- Nova's Making Stuff series by David Pogue, looks at scientific innovations that are ushering in a new generation of materials that are stronger, smaller, cleaner and smarter – he succinctly explains the discipline in this interview. This is the YouTube link: <https://www.youtube.com/watch?v=uKEtdr2Tew8>);
- You can also watch the whole series on YouTube or at this link: <https://www.pbslearningmedia.org/collection/nvms/#.XoxMb3mWwic>.
- The Ri Channel on YouTube also has interesting lectures like the one on materials for a greener future. This is the link: <https://www.youtube.com/watch?v=AjJMYDL9wKE>.
- TED – Material Science also has a list of lectures that are interesting. Here's the link: <https://www.ted.com/talks?topics%5B%5D=materials>.

English

If achieving English language skills is a part of your offer, we recommend that you practice speaking in English as much as possible while at home. The following websites may be helpful to practice your language skills, here are the links:

<https://learnenglish.britishcouncil.org/skills/> - includes information about free short courses on FutureLearn

<https://www.bbc.co.uk/learningenglish/english/hygiene/towardsadvanced-syllabus>

<https://www.talkenglish.com/lessonindex.aspx>

<https://www.futurelearn.com/courses/prepare-to-study-uk>

Further information

To try and prevent the spread of coronavirus (COVID-19) and keep our community safe, our campuses are temporarily closed, but we are continuing to prepare for the start of the new academic year and look forward to you joining us.

Latest information: We recognise that you may have some concerns and lots of questions. You can find the latest information about the changes we are making in response to coronavirus (COVID-19) on our website using this link: <http://www.imperial.ac.uk/study/covid-19/>.

Contact us: You can also contact us at the Department's admissions service by emailing Mrs Raj Adcock at this address: materials@imperial.ac.uk.

Here at Imperial, we are all looking forward to seeing you at the start of the academic year and welcoming you to our amazing community.

Wishing you all the best.

Yours sincerely,



Priya Saravanapavan
Admissions Tutor