

Now that the A levels appear to have been abandoned, you are free to do some entirely self-indulgent reading and research around a subject you enjoy. (Hopefully you'll enjoy it, as you have chosen to study it at university!)

This document will provide you with some tips for getting started and for making the most out of the time you have now before the start of the year. This first page has some general tips and advice, and then you will find more subject-specific content later on.

Some general tips

- Use this time to read, research, listen to and watch lots of different things relating to your subject – you have an unprecedented opportunity to explore the areas of your subject that interest you most.
- Take a look online at what the first year of your proposed course covers and put together a basic database as background.
- All of this should give you a bit of a head start on your studies and probably also give you some ideas of which modules or subject areas you may want to specialise in at a later date.
- You will get out of practice at writing quickly, so – particularly if you are undertaking an essay-based subject – make sure you keep writing. Even short pieces of writing responding to your research will help keep you ticking over until Autumn.
- We recommend that you focus on taking effective notes whenever you are reading or accessing content online – play around with different styles of notetaking and find out what works best for you. There are some templates you may want to use available with this pack.

There are two very good MOOCs (Massive Open Online Courses) that are well worth you looking at to help you prepare for university. Click on the links below to access them.

- [Critical thinking at University](#)
- [Preparing to learn online at University](#)

A quick note on university numbers

It has been announced (in late March) that university numbers may be capped and this may cause concern.

The number, however, will be capped at the **same** level as the past year, so this means there should be sufficient capacity for all who will qualify.

It is also very likely that there may be **spare** capacity as many overseas students may now not apply or withdraw applications. Do not be panicked into accepting an offer that is not one of your top choices just so that you get a place somewhere. If you get such an offer, contact any of your preferred choices to see if they'll match it.

You can find suggested content for the following subjects overleaf:

- Engineering
- English
- Geography
- History
- Maths
- Medical Sciences (including medicine, dentistry, veterinary and biomedical)
- Law
- Politics, Philosophy & Economics
- Sciences

For Maths

<h3>Lectures to watch</h3>  <p>Gresham College has provided free lectures within the City of London for over 400 years. The lectures below are specifically designed for A level students:</p> <p>What Have Mathematicians Done For Us?</p> <p>Mathematics Goes to the Movies</p> <p>Maths Goes Into Space</p> <p>How Maths Can Save Your Life</p> <p>The Mathematics of Climate Change</p> <p>500 Years of Mathematics: Are We Living in a New Golden Age?</p> <p>How Will We Learn Maths in the Future?</p> <p>Maths and Sport series</p> <p>Great Mathematicians series</p>	<h3>Listen to or watch</h3>  <p>Some recommended radio shows include:</p> <ul style="list-style-type: none">• Maths and Magic with magician Jolyon Jenkins• A brief history of mathematics (10 episodes)• The mathematics of elections (4 episodes – each 12-16 minutes) <p>PlayerFM and similar websites allow you to search for additional popular maths podcasts – you may want to look at <i>Breaking Math</i> or <i>Numberphile</i>.</p>
<h3>Keep Learning</h3>  <p>NRich is a great website, giving you new maths problems every month to take you from whichever level you are currently on to the next and all the way up to... Cambridge STEP level 3 – really scary stuff!</p> <p>Look at examples of Cambridge STEP papers online.</p> <p>STEP 1 shouldn't be too daunting; STEP 2 gets challenging; STEP 3... best of luck!</p> <p>Cambridge STEP</p> <p>The Institute of Mathematics UK has some free content and has an e-newsletter.</p>	<h3>Online courses</h3>  <p>Completing short courses is a great way to stay engaged with your subject at this time. Browse through websites such as MOOC.org and Futurelearn to find something that interests you.</p> <p>Some ideas to get you started are:</p> <ul style="list-style-type: none">• Advanced Precalculus: Geometry, Trigonometry and Exponentials – University of Padova• Maths Puzzles: Cryptarithms, Symbologies and Secret Codes – Weizmann Institute of Science• Precalculus: The Mathematics of Numbers, Functions and Equations – University of Padova