

*WHTC University application subject guides*

# Economics

This guide has been written to help support you in your application to university. It contains the following information relevant to your subject to help you decide where to apply and put together the best application that you possibly can:

1. **Course links**
2. **Entrance requirements**
3. **Recommended A-levels**
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## 1. Course links

Below are links to some of the top courses for this subject in the UK (according to [The Complete University Guide](#)). The number next to them shows their ranking. Click on the links to find information about what the course is like, what you'll learn, and loads of information about things such as fees and accommodation. However, remember that there are loads of other great universities out there, so check out The Complete University Guide or just google studying your subject at university.

1. [University of Cambridge](#)
2. **University of Oxford**: Oxford doesn't offer Economics on its own, but does offer [Economics and Management](#), [Economics and History](#), and [Philosophy, Politics and Economics](#)

3. [University of Warwick](#)
5. [London School of Economics and Political Science \(LSE\)](#)
9. [UCL](#)
19. [University of York](#)

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## 2. Entrance requirements

Here are the grades that the university suggests you need to get in to that course, and the likely offer that they will give you. If you're worried that your predicted grades aren't this high, don't worry – these are the universities with the highest requirements. There are plenty of other great universities out there with lower entrance requirements!

1. **Cambridge:** A\*A\*A (including A\* in maths)
2. **Oxford:** AAA or A\*AA (for Econ & Management)
3. **Warwick:** A\*AA (including A in maths)
4. **LSE:** A\*AA (with A\* in maths)
5. **UCL:** A\*AA (with A\* in maths and A in economics if offered)
6. **York:** AAB

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## 3. Recommended A-levels

Different universities may differ as to what A-levels they ask you for. Some might list one subject as 'essential', while another might list the same subject as just 'helpful', so make sure to check out the course page (under Section 1 of this document, or on the university website) to be sure what your chosen university expects!

**Maths:** Many courses require you to have Maths, although some don't so do check carefully! You definitely don't have to have done Maths A-level in order to study Econ at uni.

**Further Maths:** For more mathematical courses (e.g. Cambridge), Further Maths is strongly recommended, although not absolutely essential. Pure and Statistics modules are preferred instead of Mechanics or Decision Maths

**Economics:** Most universities list Economics as being helpful, but it is definitely not required.

In general, a mix of Maths/Science and essay-based subjects is weakly preferred, but don't let this put you off if this doesn't describe you. Check more precisely for combinations – e.g. History A-level is recommended for History and Economics.

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## 4. Admissions tests

What admissions tests are you typically required to sit in addition to submitting your application? This also differs from uni to uni, so if your chosen university isn't on this list, make sure you check out the course page so you know exactly what you need to apply.

**Cambridge:** [pre-interview written assessment in Economics](#)

**Oxford:** [Thinking Skills Assessment](#) (PPE, E&M, H&E), [History Aptitude Test](#) (H&E)

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## 5. Recommended reading

Reading some relevant books or articles is a really great way to demonstrate your passion for your chosen subject in your personal statement, and show how you've gone beyond the curriculum. Plus, if you really want to spend three

years or more studying this subject at university, it should be enjoyable! Try taking notes and jotting down your thoughts as you're reading so that you can share some of this in your personal statement

## General Micro

**Any book by [Tim Harford](#):** Tim Harford is an economist and journalist. *The Undercover Economist* is his initial best seller, focussing on interesting parts of microeconomics – it is both fun and easy to read; *The Undercover Economist Strikes Back* focuses on macroeconomics instead. There are loads more – take a look!

## Development Economics

***Poor Economics* by Duflo and Banerjee (one chapter as pdf [here](#)):** Barefoot hedge-fund managers, DIY doctors, and the surprising truth about life on less than \$1 a day. Essential reading for anyone interested in development economics and questions to do with poverty.

## Behavioural Economics

***Thinking, Fast and Slow* by Daniel Kahneman:** Kahneman is a psychologist who won the Nobel Prize in Economics. This book looks at the many ways in which human beings aren't really as rational as standard economic theory might suggest, exploring multiple biases and heuristics (rules of thumb) that people use when making decisions or evaluating things. He discusses many interesting experiments with surprising outcomes. How rational are you?

***Nudge* by Thaler and Sunstein:** How can we improve organ donation rates? How can we ensure that everyone saves enough for their retirement? A law professor and a Nobel-Prize-winning economist look at why we make the choices we do and show how very small changes in our environment can lead to big changes in the decisions we make, with huge implications for our lives. Lots of surprising and interesting examples from all parts of life.

## Finance

***The Bankers New Clothes* by Admati and Hellwig:** A great book looking at what went wrong in the banking system to cause the financial crisis, and what needs to be done to fix it.

## Macro

***The Accidental Theorist* by Paul Krugman:** A collection of well-written, witty essays from perhaps the world's most famous living Economics Nobel Prize winner. Covers lots of topics such as globalisation, growth, and what's happening with jobs.

***GDP: A Brief but Affectionate History* by Diane Coyle:** Why did the U.K. financial industry show its fastest expansion ever at the end of 2008, just as the world's financial system went into meltdown? Coyle looks at how GDP is defined and measured, and the very real implications that this has on our world

***The Value of Everything: Making and Taking in the Global Economy*, by Mariana Mazzucato:** What does it mean for something to have value? This book explores this problem and questions whether much of our modern economy is really providing us with value. Especially interesting in the current situation, where our 'key workers' are often the ones who are paid the least. It also starts with a great introduction to economic history!

***Why Nations Fail* by Acemoglu and Robinson:** Why do some countries prosper while others don't? Why have certain nations and civilisations lasted longer than others? Why is the USA the most powerful country in the world today, and is that likely to change? A fascinating work of political economy, the book looks at the interplay between politics and economics – focussing on the power of institutions in particular – and asks lots of big questions about why the world is the way it is and where we go from here.

More suggestions from Oxford students [here](#)

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## 6. Interesting MOOCs

Another great way of learning more about your chosen subject and demonstrating your interest is to take a MOOC, or Massive Open Online Course. These are free courses delivered by universities that you can take online. If the ones below don't take your fancy, try looking at [Class Central](#) - they have a huge list of different courses for every subject imaginable, and they're all free!

[Welcome to Game Theory](#) (University of Tokyo): This course provides a brief introduction to game theory. The main goal is to understand the basic ideas behind the key concepts in game theory, such as equilibrium, rationality, and cooperation. The course uses very little mathematics, and it is ideal for those who are looking for a conceptual introduction to game theory.

[China's Economics Transformation](#) (Hong Kong University of Science and Technology): In 1978, after nearly 30 years of socialist planning under Mao Zedong, China was one of the world's poorest countries, saddled with an inefficient, inward-looking economy. Today, China is an upper-middle income country and the world's largest trading nation, contributing more to global economic growth than any other nation. How could such a remarkable transformation take place?

[Introduction to Economic Theories](#) (Erasmus University Rotterdam): An introduction to different economic theories, going beyond the mainstream. Gives insight into four different viewpoints that can be used to look at Economics

[Public Economics](#) (Higher School of Economics): An introduction to Public Economics, a branch of Economics looking at the role of government in the Economy. It looks at topics such as how the government can correct market failures, the economics of taxation and regulation, and the limitations of government

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## 7. Useful additional resources

There are loads of other great things out there that you might want to look at to develop your interest and strengthen your application, from videos to podcasts, to websites. Here are a few suggestions:

**[The Economist](#)**: A leading news magazine covering politics, economics and much more. Useful for following the latest economic developments globally and in different regions. Also check out the 'Finance & economics' section. You can read a few articles for free each month.

**[50 things that made the modern economy](#)**: A fascinating podcast from Tim Harford, the Undercover Economist, looking at 50 ideas and products that have helped shape our economy at different points in history.

**[Cautionary tales](#)**: The latest series from Tim Harford. Tells funny or surprising stories that often teach us a key economic lesson.

**[Freakonomics Radio](#)**: Discover the hidden side of everything. A podcast from one of the authors of Freakonomics, telling some often weird and funny tales involving economics

**[Gresham College](#)**: A collection of interesting lectures on a whole range of different topics

**[Economics Observatory](#)**: A new resource bank bringing together materials about the Economics of COVID-19 and the recovery

**[The Dorian Fisher Memorial Prize](#)**: Essay prize for A-level students run by the IEA think tank. 2020 deadline: 24<sup>th</sup> July. Entries consist of three very short essays from a choice of questions.

**[Royal Economic Society Young Economist of the Year Prize](#)**: one 1500-word essay on one of five titles. £1000 prize. 2020 deadline: 27<sup>th</sup> July.

**Immerse Education Essay Competition:** Chance to win a scholarship to attend a summer school at the University of Cambridge. 2020 deadline: 31<sup>st</sup> August.

**Marshall Society Essay Competition:** Essay competition run by students at the University of Cambridge (doesn't appear to be running in 2020)

**LSE Economics Essay Competition:** Competition run by students at LSE. 1500-word essay from a choice of titles. 2020 deadline: 1<sup>st</sup> August.

**John Locke Institute Essay Competition:** Essay competition from an educational institution. Essay of up to 2000 words on a choice of questions. Deadline 15<sup>th</sup> July.

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## 8. Related courses

At university, there are loads of different combinations of subjects that you can do. Maybe you might find one of these alternatives more interesting? A few ideas are listed below with a sample link, but in most cases there are lots of universities that offer these different combinations so make sure to have a good look around!

You can combine Economics with almost any other subject. Check out the range of options at [Warwick](#) and [LSE](#) alone!

As well as combining with different subjects, many universities also offer variations on Economics which tend to have slightly different focuses or are more or less Maths-intense. You might be interested in courses that include the following:

**Financial Economics** (e.g. [City University](#))

**Economics and Industrial Organization** (e.g. [Warwick](#))

**Mathematical Economics** (e.g. [LSE](#))

**Econometrics** (e.g. [Bristol](#))



**Economic History** (e.g. [LSE](#))

**Economics and Finance** (e.g. [York](#))

**Land Economy** (e.g. [University of Cambridge](#))

Courses that are described as BA Economics are likely to contain less Maths and Statistics than those described as a BSc Economics. BA Economics courses will focus more on theory and related social sciences.

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## 9. Oxbridge example interview questions

As you will know, applicants to Oxford and Cambridge have to take an interview in order to get a place. It is normal to get open-ended questions, as well as being given charts or pieces of writing to analyse. Here is a sample of the kind of questions you might get asked. Remember, you're supposed to not know the answer! They often deliberately choose topics that they think no one will have studied in order to make the questions fair. What they're looking for is to see how you think under pressure, and how you can present your ideas and your logic.

### Questions with discussion

Interviewer: Brian Bell, Lady Margaret Hall, Oxford

Q: Why is income per head between 50 and 100 times larger in the United States than in countries such as Burundi and Malawi?

Brian: The question is focused on perhaps the most important economic question there is: why are some countries rich and some countries poor? As with most economics questions, there is no simple or unique answer. Candidates need to think about all the potential reasons why such income gaps exist. A good starting point is to think about whether the amount of capital and

technology available to workers in different countries is the same and if not, why not? US workers are much more productive because they have access to the best technology – the US is at the technological frontier. But why do poor countries not just buy the same technology and be as productive? Possibly, the education levels are too low to allow for the use of such technology or perhaps there are insufficient savings to purchase the technology or the infrastructure might not exist. Good candidates should recognise that institutions matter a lot – respect for property rights and the rule of law appear to be pre-requisites for sustainable development. Other factors might include trade restrictions by the rich world on poor countries exports, civil wars, disease (e.g. AIDS, Malaria) etc. The trick is to think widely and not try and fit the answer to some lesson that has been learnt in school.

Interviewer: Brian Bell, Lady Margaret Hall, Oxford

Q: Do Bankers deserve the pay they receive? And should government do something to limit how much they get?

Brian: This is a very topical question in light of the recent financial crisis. A simple answer might be that since banks are generally private firms and workers are free to work where they wish, then the pay they receive is just the outcome of a competitive labour market. In this story, bankers earn a lot because they are very skilled and have rare talents. It is hard to see a reason for government intervention in this case – though on equity grounds one may want to have a progressive income tax system that redistributes some of this income. A good candidate would wonder why it is that seemingly equivalently talented people can get paid so much more in banking than in other occupations. Do we really believe that bankers are so much better than other workers in terms of skill? An alternative story is that the banking industry is not competitive and generates profits above what a competitive market would produce. This would then allow workers in that industry to share some of those profits and so earn much more. In this case, there is a role for government intervention – making the market more competitive. The key point about this

question is trying to get candidates to think about the economics of pay rather than just whether they think it is fair or not.

Interviewer: Nick Yeung, University College, Oxford

Q: Imagine that 100 people all put £1 into a pot for a prize that will go to the winner of a simple game. Each person has to choose a number between 0 and 100. The prize goes to the person whose number is closest to  $\frac{2}{3}$  of the average of all of the numbers chosen. What number will you choose, and why?

Nick: I like this as a question because answering it brings in a range of skills. Partly it involves numerical and analytical skills: the question implies that the answer will be  $\frac{2}{3}$  of some other number, but which one? Some people's first guess is  $\frac{2}{3}$  of 100, i.e., 66 or 67, in which case I'd ask them what numbers everyone else would have to pick for them to win. In this case, everyone else would have to choose 100, which is unlikely. More often people first guess  $\frac{2}{3}$  of 50 (33), which seems intuitively more likely. At this point, and usually without prompting, the recursive nature of the solution becomes clear: If there is good reason for me to choose 33, then maybe everyone else will choose 33 too, in which case I should choose  $\frac{2}{3}$  of 33... but then everyone will think this and choose  $\frac{2}{3}$  of 33 too, so I should choose  $\frac{2}{3}$  of that number.. and so on. Assuming everyone thinks like this, then everyone will eventually settle on 0 as their choice – this is the formal 'game theory' solution. At this point, I'd ask questions that bring out the candidate's broader reasoning skills in terms of thinking how we could define what it is rational to do in this game. Game theory gives one definition of rationality, but does it give a plausible winning answer – that is, is it likely that everyone, all 100 of them, will go through exactly the thought process we've just described? If not, is 0 really a rational answer? The question also has a psychological angle in thinking about reasons for people's behaviour and choices: Will everyone put in the same effort? Will everyone be motivated to win? When I've used this question in live audiences, sometimes people say they'd pick the number 100 just because it'd throw a spanner in the works for everyone playing the game rationally. How should this affect your

choice of answer? What if the stakes were increased so that everyone put £1000 into the pot at the start?

What's clear from all of this is that we're not looking for a single answer. Rather, we're interested in seeing how people think through a problem, figure out what are the relevant factors, respond when new information is provided, and so on.

Interviewer: Terry O'Shaughnessy, St Anne's College

**Q: The Holiday Puzzle:**

"Alex and Brian are cousins. They are planning a four-day holiday in Venice and they each have 400 euros to spend. (They have already paid for their return flights and for their hotel room.) On the flight to Venice Alex and Brian discuss how they should each allocate their spending over the four days.

Alex believes that the satisfaction he gains from spending a certain amount  $x$  euros on a given day is proportional to  $\sqrt{x}$ . Explain why this might be a reasonable way to represent his preferences. If he has these preferences how would you expect him to allocate his spending over the four days?

Brian has the same preferences as Alex, but he knows that he tends to be impatient. This means that, on any given day, he tends to give extra weight to the current day's spending when he makes his spending decisions for that day. Thus on a given day he behaves as if the satisfaction he would gain from spending  $x$  euros would be  $\sqrt{(2x)}$  whereas he thinks that on subsequent days the satisfaction he will gain from spending  $x$  euros will be only  $\sqrt{x}$ .

If Brian has these preferences how would you expect him to allocate his spending over the four days?

Is there a better way for Brian to allocate his spending and, if so, how might he achieve this better outcome?

Does your analysis of this problem have any implications for any current economic policy issues?"

After asking one or two general questions such as 'what topic in Economics have you enjoyed most, or found most surprising' we move on to working through a puzzle. We give the candidate a copy 10 minutes before the interview starts. We might spend 10-15 minutes going through the implications of the puzzle during the interview, though this depends on how far candidates get, and how quickly they get there!

Each puzzle is designed to see how willing candidates are to abstract from the complexities of a 'real world' case involving some economic principles and to put such principles 'to work'. There is usually some simple mathematical ideas involved (in this case, the idea that the utility function provided implies that it is best to allocate spending uniformly over the four days). However, we do not expect any calculations to be performed, though drawing a diagram is often useful (as it is in this example).

### Short Questions

- What's the difference between a correlation and a cause and effect relationship? (intro question)
- What do you think are the main economic effect of COVID-19? Why do you think the recovery period might be short/long?
- Why is it that the people we now call 'key workers' are often some of the least well-paid workers in society?
- What would you say if the Prime Minister were to take a report which shows that people who go to university earn more than those who do not, and then proclaim that going to university causes you to earn more?
- Should governments subsidise agriculture?
- What is the point of privatisation?

- If the government passed a law requiring people to wear seatbelts, why might this result in more road accident casualties?
- Would it be feasible to have an economy entirely based on the service sector?
- If a Martian drops money across the country, does inflation go up?
- Why is a film actor wealthier than a theatre actor?
- I give you £100. You have to offer part of this £100 to someone. Unless they accept the offer, you get nothing. How much will you offer?
- If a petrol station, on a road, is equal distant from two towns, where should the next petrol station be built?
- A new country is formed in Africa. They introduce a new currency. How does the international market value what it is worth?
- Can we really measure GDP?
- What is globalisation? How has globalisation affected the economy? What does the average citizen gain from globalisation?
- Can addiction be rational?
- Is saving a stranger's life from drowning a rational or irrational action?
- How important are economic models?
- In your opinion, is poverty an essential ingredient of capitalism?
- What do you think is the biggest issue facing developing countries today?