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# Economics

**SYLLABUS OVERVIEW**  
13-15 YEARS OLDS

**immerse**  
EDUCATION

## About Immerse

**Immerse Education is an award-winning academic summer school provider offering programmes for 13-15 year olds in Cambridge University colleges.**

The aim of these introductory programmes is to provide participants with academically challenging content in a classroom environment based on the university style of learning. Through 40 hours of academic sessions, the programmes also offer young students unique and valuable insights into what it would be like to study their chosen subject at an advanced level.



This Syllabus Overview provides a summary of the topics and subject areas that participants can encounter during their studies with Immerse. It has been carefully created by our expert tutors who are current members of world-leading universities, and who have experience in teaching undergraduate students.

## Academic Sessions

The academic sessions at Immerse are arranged into modules to enable participants to explore a broad range of topics over the course of two weeks. The modules included in this syllabus overview are indicative but not prescriptive.

Tutors are encouraged to include their own specialisms and also focus on any particular areas of interest expressed by participants within the class. They may choose to provide further detail on a specific topic, or they may include new material and information that builds on the knowledge already developed during the programme.

## Personal Project

Each programme includes an element of individual work, generally termed the 'Personal Project'. This can take many forms but is commonly an essay or presentation delivered on the final day of the programme. Participants will receive feedback on this work which may also be mentioned in the participant evaluation which is provided in writing by the tutor once the programmes have ended.





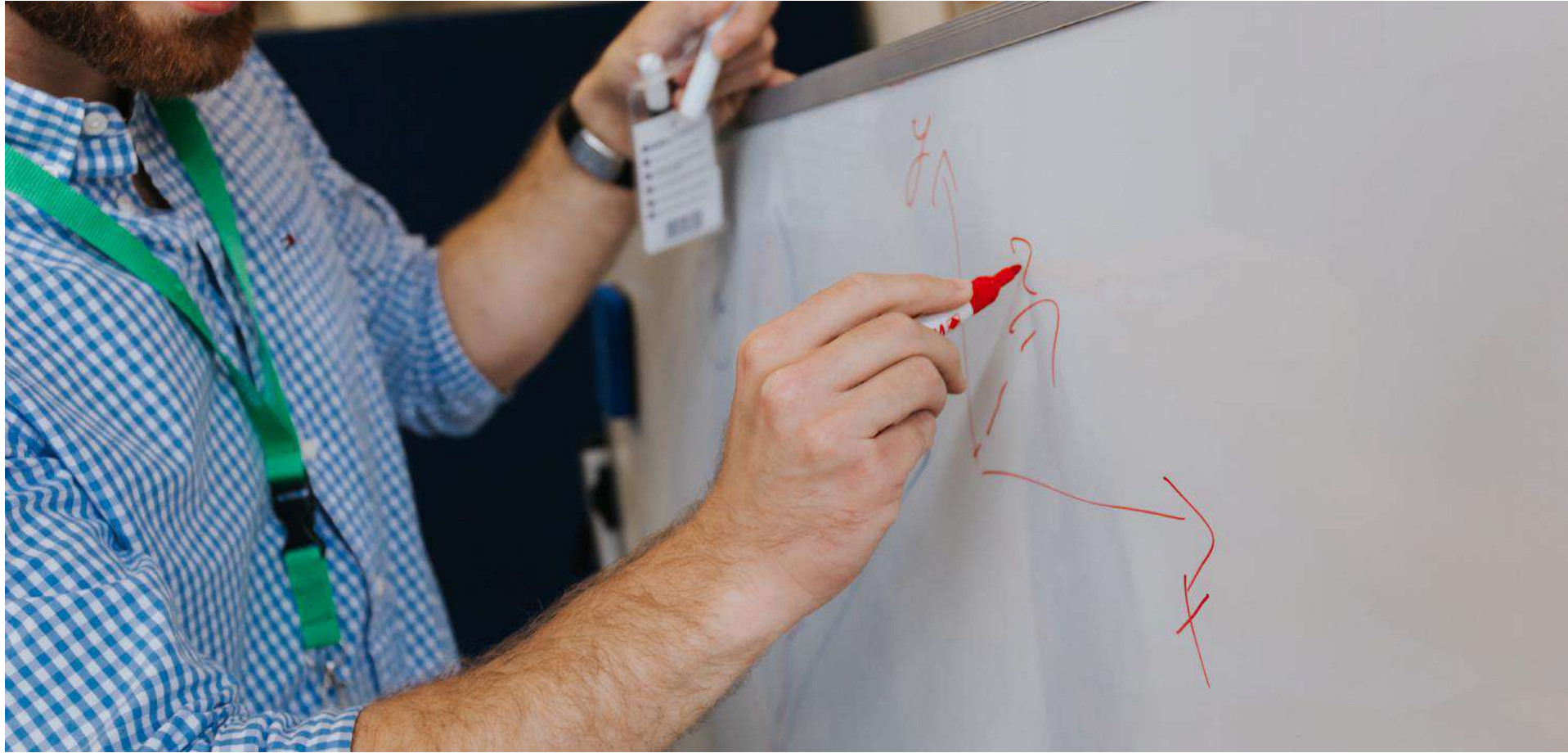
## Preparatory work

Some tutors may ask participants to complete some preparatory work, such as reading or a series of exercises in advance of the programme. Participants are strongly encouraged to complete this work since it will be included in the opening sessions of the programme. Any preparatory tasks will be provided in advance of the programme directly to the participant.

## Academic Difficulty

**As all of our programmes are designed to provide a unique introduction to advanced material, the syllabus will be academically challenging at times.**

This is something to be excited about and all of our tutors will encourage and support participants throughout the programme. Immerse Education aims to develop every participant regardless of ability, and our tutors will adapt their teaching to individual needs.



## Aim of the Economics Programme

Economics is a broad, interdisciplinary subject that seeks to make sense of the interactions and exchanges that happen locally and globally. Linking to geography, international relations, politics, psychology, mathematics, business and many more disciplines, economics is very well-regarded across the world. The aim of the Immerse Education Economics programme is to introduce participants to the foundations of this subject and highlight the pathways that are available to those who would like to pursue economics further in the future. Participants will get to grips with a variety of key economics principles and apply these to current and historic examples from around the world.

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Unique Academic Enrichment Programmes

# Introduction to Microeconomics – Supply and Demand

In this topic we explore how humans make the best use of the scarce resources they are endowed with. We discuss the standard demand and supply framework and how equilibrium prices and quantities are determined. The consumer utility maximisation problem and producer profit maximisation problems are outlined with a range of examples. We will also introduce the concept of game theory and how strategic decisions are made. This allows us to cover the classic prisoner's dilemma as well as a number of illustrative examples.

# Microeconomics – Firms and Markets

This topic covers the key market structures in microeconomics. We analyse why prices and quantities may differ between, for example, a monopoly and a competitive market. We answer the following questions: What are the advantages of free markets? What are market failures? How can we address market failures? Should firms collude? Participants are encouraged to conduct independent research based on the theory they learn and to collaborate with their peers to form coherent, well-structured arguments supported by examples.





# Introduction to Macroeconomics

What is the relationship between microeconomics and macroeconomics? We directly address this question which allows us to outline the key sectors of the economy and how they interrelate. We discuss the measurement of GDP and major macroeconomic aggregates in the United Kingdom. Inflation will be outlined and the associated advantages and drawbacks. The Solow growth model will be introduced as a key framework to help us think about long-run economic growth.

# Macroeconomics and Fiscal Policy

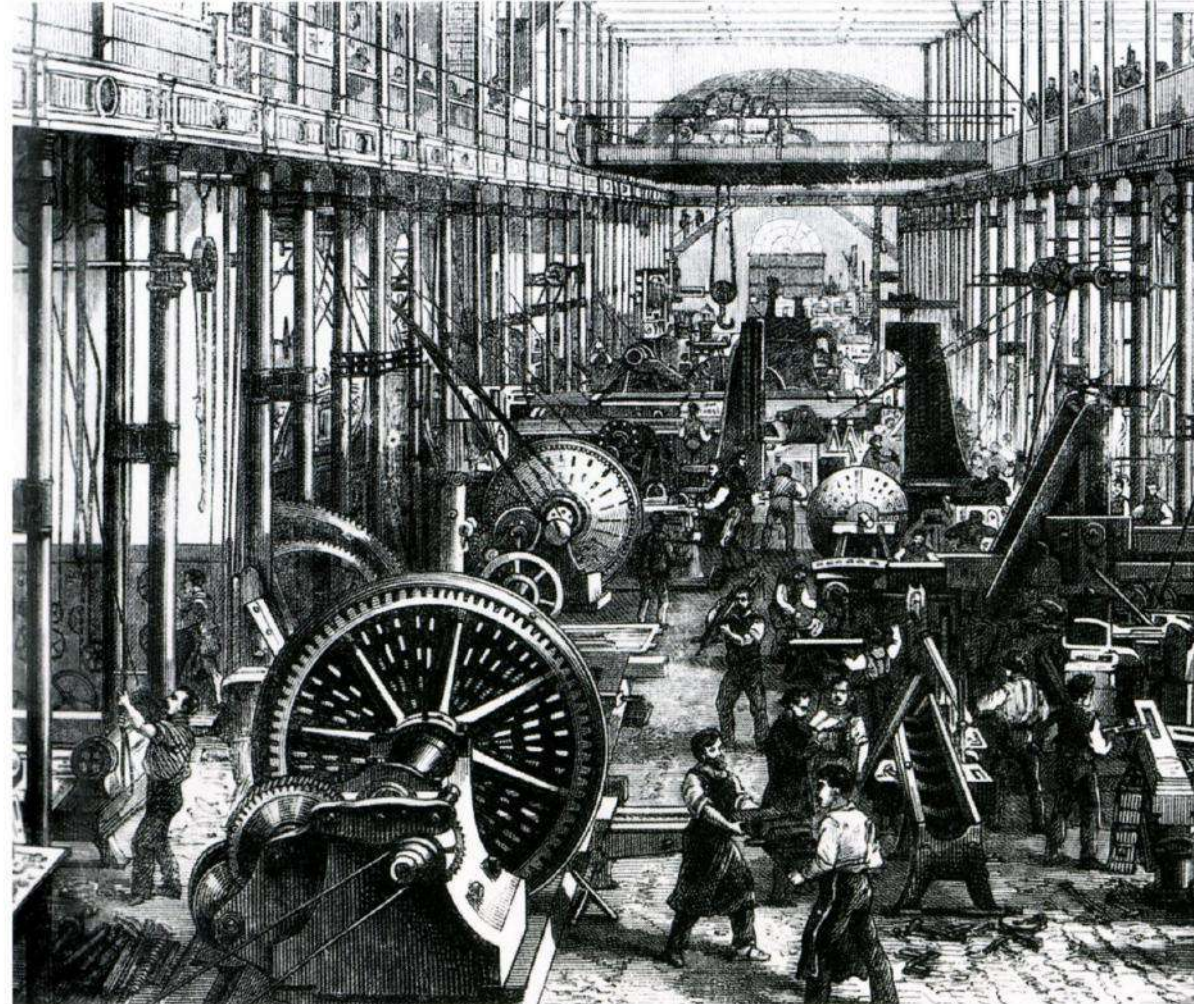
In this topic we explore how the real economy works at the macroeconomy level and the role for government policy. The interaction of aggregate demand and aggregate supply will be discussed as well as how the government can use fiscal policy to influence the economy. We will answer the following questions: What is the fiscal multiplier? How do governments borrow money and at what cost? Is austerity effective?

# Monetary Economics

In this topic we introduce monetary economics and discuss the following questions: What is money? What is the role of central banks like the Bank of England and the Federal Reserve? What are the key objectives of central bankers and how have these changed over time? We will see how central banks are related to the banking sector and discuss fractional reserve banking and the transmission of monetary policy. Lastly, we consider the main tools of central banks and ask if digital currencies – such as Bitcoin – are likely to increase in importance in the future.

## Economics History

What was the Industrial Revolution? What are some of the most important technological advances in the past 2,000 years? What can history tell us about the future? This topic will cover the main themes in economic history and how they have led us to our current modern economy. In understanding the economics of the past, participants will uncover the tools that exist to allow us to predict (with varying degrees of success) how the future of economics will play out through specific case studies.







## TOPICS LIST

## Political Economics

This topic seeks to ask not what policies government *should* choose but what policies governments do choose. Students will be introduced to economic theory about voting and elections (which includes an introduction to game theory) as well as a discussion about special interest groups and lobbying. Through a series of examples, participants will begin to understand the complexity of political motives, whether personal, party, or national and the impact that this can have upon economics.

## Game Theory

Game theory discusses strategic interaction between decision-makers who are considered to be logical. It is a useful tool to study situations in which the outcome of a player's choice of action depends on the actions of other players. In this part of the course, we will introduce some of the core concepts from the discipline: dominant strategies, iterated deletion, Nash equilibrium, mixed strategies, subgame perfection and repeated games. These concepts will be illustrated through applications (e.g., the median voter theorem). We will also test the predictions of game theory using classroom experiments.

# Behavioural Economics

In this topic, we will question the accuracy of the assumptions on which we have relied so far. In particular, we will argue:

- 1) people do not only care about their material self-interest (i.e., preferences are 'social')
- 2) people do not weigh present and future benefits against each other in a rational way
- 3) people are irrationally 'loss averse' and susceptible to ways in which problems are framed
- 4) people do not understand that money is fungible
- 5) people make judgements using heuristics that lead to systematic biases when applied in certain environments.



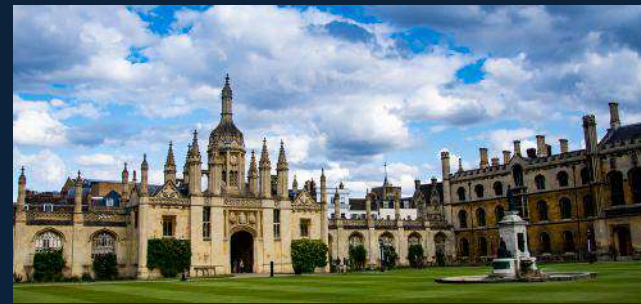


## Personal Project

Throughout the fortnight, participants will be working on their own personal project. Having been provided with a brief, participants should research and prepare a presentation for their peers. This will build upon an aspect of the theory that they have learnt over the course of the programme and is also an opportunity to showcase their ability to apply this to practical examples. The presentation is followed by questions from the audience and wider class discussion of particular points of interest. The tutor may also include feedback about the presentation in the written evaluation which is sent to participants after the programme has ended.

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OUR AWARDS AND ACCREDITATIONS

