

## Economics with a Year in Industry BSC (Hons)

## **COURSE DETAILS**

- A level requirements: <u>AAB</u>
- UCAS code: L101
- Study mode: Full-time
- Length: 4 years

## **KEY DATES**

- Apply by: <u>31 January 2024</u>
- Starts: 23 September 2024

## **Course overview**

Taught by academic staff with an abundance of professional industry experience who utilise the latest economic thinking, this programme will help you develop a high level quantitative and analytical skills in any of our three pathways: Economics, Finance or Data and Econometrics.

Our Economics programmes are ranked 5th in the Russell Group for teaching quality, 8th in Russell Group for student experience and have an overall ranking of 15th from 71 providers. (Times Good University Guide 2023).

\*based on subject area.

## INTRODUCTION

Studying Economics at Liverpool will enable you to build a thorough understanding of current economic and financial issues. Our programme will help you develop a high level quantitative and analytical skills in any of our pathways: Economics, Finance or Data and Econometrics.

From your first year of study you will start to build a strong foundation in economics, statistics and mathematics and upon successful completion of your final year you will have a

thorough understanding of a wide range of theoretical tools used in economics and where applicable, in finance.

## WHAT YOU'LL LEARN

- Develop economic thought
- Gain professional skills and employment preparation
- Understand economic and business statistics
- Mathematical economics
- Financial risk management
- Principles of microeconomics and macroeconomics
- Econometrics
- Financial accounting

## ACCREDITATION

The University of Liverpool Management School holds accreditation from <u>AACSB</u>, <u>AMBA</u> and <u>EQUIS</u>. This makes it one of an elite group of institutions worldwide to hold the gold standard 'triple-crown' accreditation.

Our Economics course is accredited by the <u>Institute of Chartered Accountants in England and</u> <u>Wales (ICAEW)</u>, the <u>Association of Chartered Certified Accountants (ACCA)</u> and the <u>Chartered Institute of Management Accountants (CIMA)</u>.

## **Course content**

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

## YEAR ONE

Your first year at Liverpool will give you a strong foundation in economics, statistics and mathematics, and equip you with the qualitative and quantitative techniques needed to address economic issues.

Both economic and financial pathways will see you begin to develop your economic thought and introduce you to the principles of microeconomics and macroeconomics. Whereas the finance pathway will also provide an introduction to finance and financial accounting.

In year one, students on the Economics pathway can do either ACFI101 or ECON159 in semester one. In semester two they can do either ACFI102 or ACFI103.

Students on the Finance pathway have no optional modules and must complete ACFI101 and ACFI103.

Students on the Data and Econometrics pathway take the same modules as the Economics pathway excluding ACFI101 and ACFI102.

## **COMPULSORY MODULES**

## **DEVELOPMENT OF ECONOMIC THOUGHT (ECON128)**

#### Credits: 15 / Semester: semester 1

This course looks at the evolution of economic thought, ideas and doctrines. Like the history of philosophy or science, the aim is not to understand the details of the economic phenomena (you will study these in in modules across your degrees) but how people have tried to make sense of the philosophy. Such economic ideas feed into politics and influence what happens in the economy or even science (and not necessarily in the way the progenitors intended!). The Political and scientific environments can then also influence economic ideas. On completing this course you will understand how the discipline's influential people such as Adam Smith, Karl Marx, John Maynard Keynes and other (not quite as famous) economic philosophers perceived and analysed the economic world, which created the modern economic environment in which we live and which we study.

## MATHEMATICAL ECONOMICS (ECON113)

#### Credits: 15 / Semester: semester 1

This module introduces students to techniques of proof and mathematical methods that will be assumed elsewhere in the programme. It prepares students for the Year 2 Mathematical Economics II option, which is a prerequisite for certain Year 3 modules.

#### PRINCIPLES OF MACROECONOMICS (ECON123)

#### Credits: 15 / Semester: semester 2

This module complements and builds on Principles of Microeconomics and provides a foundation for further studies in macroeconomics. It introduces concepts and theories of economics which help understand changes in the macroeconomic environment and enables students to explain and analyse the formulation of government macroeconomic policy.

#### PRINCIPLES OF MICROECONOMICS (ECON121)

#### Credits: 15 / Semester: semester 1

The module acquaints the student with a foundation in neo-classical microeconomics. The module equips students with the knowledge and mathematical tools to approach fundamental problems in microeconomic analysis. Students are introduced to the importance of theoretical models and their role. The module is supported by a customized textbook. Students who engage fully with this course will receive a solid foundation in microeconomics, which forms the foundation of all future courses in microeconomics and related subjects.

#### PROFESSIONAL SKILLS AND EMPLOYMENT PREPARATION (ECON170)

#### Credits: 15 / Semester: semester 2

This module aims to provide students with the key skills required of the professional economist in the current business environment and to prepare students for an Economics based year in industry by providing them with an understanding of the skills required to secure a work placement and gain the most from their placement experience. It also provides the opportunity to acquire, develop and apply these skills.

## STATISTICS & DATA ANALYSIS FOR ECONOMICS AND BUSINESS (ECON112)

#### Credits: 15 / Semester: semester 2

The aim of this module is to give students an understanding of how statistics operates in Business and Economics. This module serves both as a foundation for further study and as a broadly based introduction to statistics and data analysis. It is practically based and will teach the foundations of statistical analysis including calculating and presenting statistics from sample data and inferential techniques for making inferences about variable parameters from these as well as a good understanding of probability and variables as probability distributions.

## **OPTIONAL MODULES**

#### GLOBAL ECONOMIC (AND BUSINESS) ENVIRONMENT (ECON159)

#### Credits: 15 / Semester: semester 1

This module considers the changing nature of the world economy and economic globalization, examining the role of transnational corporations, states and other organizations, labour, consumption and the complex relations between them that are transforming the global economy through the operation of transnational corporations and global production networks, and the actions of states, interest groups and technology in facilitating this shift.

## INTRODUCTION TO FINANCIAL ACCOUNTING (ACFI101)

#### Credits: 15 / Semester: semester 1

ACFII0I aims to develop a sound understanding of the fundamental principles and techniques of financial accounting. The context and purpose of financial statements is introduced, after which students are introduced to the techniques of recording financial transactions, adjusting financial records and preparing basic financial statements. Successful students will possess a sound base of knowledge for progression towards studying financial reporting in greater depth in the second and final years: the preparation of complex financial statements in conformity with International Financial Reporting Standards (IFRS), both for single entities and groups of companies, and for entities undertaking a wide range of accounting transactions. This module is delivered by means of lectures and tutorials, supported by online self-study question material.

#### INTRODUCTION TO FINANCE (ACFI103)

#### Credits: 15 / Semester: semester 2

This module introduces students to fundamental concepts in finance. The course aims to provide a firm foundation for the students to build on later on in the second and third years of their programmes, by covering basic logical and rational analytical tools that underpin financial decisions. The course covers topics such as the structure of firms and time value of money. Building on these notions, we then discuss the valuation of simple securities such as bonds and equities. The course also introduces students to project appraisal techniques.

#### INTRODUCTION TO MANAGEMENT ACCOUNTING (ACFI102)

#### Credits: 15 / Semester: semester 2

The aim of this module is to introduce students to the nature and purpose of management accounting and to establish a solid foundation in its fundamental techniques. The module will explore and apply a range of basic techniques to produce information that aids management decision making. The techniques covered include cost volume profit analysis, budgeting and investment appraisal. Throughout the module the techniques studied will be applied to contemporary issues in the commercial world.

Programme details and modules listed are illustrative only and subject to change.

## YEAR TWO

In your second year of study, you will build upon your first year modules in microeconomics and macroeconomics and you will be introduced to the study of econometrics, a key area for anybody working in economics or planning to study economics at postgraduate level.

Similarly to your first year, both pathways will undertake core modules which include Econometrics, Macroeconomics and Microeconomics. Depending on your selected pathway, you will have a selection of optional modules to take in both semester one and semester two.

In year two, students on the Economics pathway can do either ECON217 or ECON215 in semester one. In semester two students can do either ECON211 or ECON241 or ECON251.

Students on the Finance pathway can do either ECON211 or ECON241 or ECON251 in semester two. ACFI204 is a compulsory module on this pathway only.

Students on the Data and Econometrics pathway should note that ECON215 and ECON251 are not included as optional modules in year 2.

## **COMPULSORY MODULES**

#### ECONOMETRICS 1 (ECON212)

#### Credits: 15 / Semester: semester 1

Econometrics is a branch of economics aimed at providing rigorous statistical techniques to test, empirically, the validity of economic hypotheses and economic models using data from the real world. Therefore, this module provides students with opportunities to develop and further strengthen important, but crucially transferable, advanced academic skills in economics, mathematics, statistics and computing, which can be used in a variety of different contexts such as applied economics and finance research. These skills are very useful and in high demand by graduate employers. A key feature of this module is the combination of rigorous theoretical foundation of OLS with hands-on applications using a relevant analytical software package (for example, EViews or STATA) and economic data.

#### **MICROECONOMICS 1 (ECON221)**

#### Credits: 15 / Semester: semester 1

Introduction to the functions of individual decision-makers, both consumers and producers. Students will learn the major principles of microeconomics including consumer theory, producer theory, and general equilibrium. Perhaps more importantly, students will also learn how to apply these principles to a wide variety of real world situations in both personal and professional lives.

### MACROECONOMICS 1 (ECON223)

#### Credits: 15 / Semester: semester 1

The module provides training in the principal methodologies, theories and techniques of modern macroeconomic analysis. It is designed to introduce classic macroeconomic issues such as growth, inflation, unemployment, interest rates, exchange rates, technological progress, and budget deficits. The course will provide a unified framework to address these issues and to study the impact of different policies, such as monetary and fiscal policies, on the aggregate behaviour of individuals. These analytical tools will be used to understand the recent experience of the United States and other countries and to address how current policy initiatives affect their macroeconomic performance.

#### **ECONOMETRICS 2 (ECON213)**

#### Credits: 15 / Semester: semester 2

The aims of this module are to build on ECON212 by extending the treatment of regression to the multiple regression model and to develop practical research skills which would be expected from a graduate in Economics either as a foundation for postgraduate study or for work as a professional economist recruited at graduate level.

#### **MICROECONOMICS 2 (ECON222)**

#### Credits: 15 / Semester: semester 2

This module aims to introduce students to three topics in microeconomic theory: game theory, asymmetric information and welfare economics.

#### MACROECONOMICS 2 (ECON224)

#### Credits: 15 / Semester: semester 2

The aim of this module is to further extend the study of macroeconomic theory at the intermediate level by analysing business-cycle fluctuations in closed and open economies using the real business cycle model and also the new Keynesian model that are based on microeconomic foundation. On completion of this module, students should be able to: (1) discuss the microfoundation of modern macroeconomic models; (2) explain the implications of macroeconomic disturbances and fiscal policies using the real business cycle model; (3) contrast the different implications of monetary policies in the real business cycle model and in the new Keynesian model; and (4) analyse business cycles in the open economy.

#### FINANCIAL MANAGEMENT (ACFI204)

#### Credits: 15 / Semester: semester 1

The module aims to introduce students to the modern theory of finance and financial management. Theoretical concepts like the net present value, decision making under uncertainty, portfolio selection and the capital asset pricing model are introduced. These concepts serve as prerequisites for investment and financing decisions which are exemplified by an analysis of valuation of firms, capital structure decisions and dividend policy. More specifically, the topics covered are the value and capital budgeting, portfolio theory, models of security valuation, efficient markets, long-term financing, company dividend decisions, capital structure, and interactions of investment and financing decisions. In all cases contemporary examples will be used to make theory come to life.

## ECONOMICS OF DIVERSITY & INCLUSION (ECON217)

#### Credits: 15 / Semester: semester 1

This module provides a thorough introduction to the economics of diversity and inclusion. In this module, we will explore how diversity and inclusion promote economic growth within a firm and in the broader economy. While many disciplines treat diversity as a qualitative issue, this module will use the theoretical and empirical tools developed by economists to examine the impact of diversity and inclusion. A key facet of this module will be examining the barriers that exist within firms and society to fostering inclusion for different groups. By combining theory with empirical techniques and results, students will learn how to critically examine data, participate in economic debates, and analyse policy.

## **OPTIONAL MODULES**

#### ANALYSIS OF BIG DATA: PROGRAMMING, DATA MANAGEMENT & VISUALISATION (ECON215)

#### Credits: 15 / Semester: semester 1

The scale of data available to analysts and researchers has increased rapidly over the past two decades. There are more careers available where analysing data is central, and there is generally an increasing demand within economics related careers for familiarity with programming languages such as Python and SQL, in order to perform more sophisticated tasks with data or to work with large data sets.

This module aims to help students develop these relatively challenging higher-level data and computing skills, particularly skills for managing data sets and producing useful visualisations with data. The module will draw on earlier quantitative/mathematical modules in the BSc Economics and on the concurrent module ECON212.

The module is for students who would like to perform data management tasks, create visualisations of data (graphs, charts, etc), and learn to analyse data, using the Python programming language. Unlike ECON212, ECON213, ECON311 and ECON312, this is not a module on econometric or statistical methodology – the focus is on developing a specific set of computing skills that will be useful for those who wish to pursue data-intensive careers or postgraduate research degrees after graduation from the BSc Economics.

Though the lectures and lab sessions centre around one particular textbook, participants on the module are expected use the vast amount of internet resources freely available for learning Python and SQL, and to spend time modifying code examples in order to gain competency with the facilities for data management, data visualisation, and data analysis. The module is assessed with a 2-week Python coursework project at the end of the module, where students will need to use the competency that they have gradually acquired over the course of the semester, and also with a timed written exam (Python and SQL).

## MATHEMATICAL ECONOMICS 2 (ECON211)

#### Credits: 15 / Semester: semester 2

The aim of this module is to introduce students to the use of mathematical models in the study of Economics. This module builds on the material of the first year Mathematics and Economics modules and will deepen students' knowledge of mathematical techniques involved in Microeconomics and game theory. At the end of this course, students will have: Al. More advanced mathematical skills A2. Know how to use models to solve some economic problems using matrix and optimization.

### SECURITIES MARKETS (ECON241)

#### Credits: 15 / Semester: semester 2

This module seeks to provide students with an understanding of the role of securities markets in the global economy. This will be achieved through a presentation of their basic mechanisms and technical features, an explanation of the valuation of certain financial assets and an assessment of the operational and allocative efficiency of the markets. The module will be delivered via weekly small group face to face sessions and through weekly online lectures delivered asynchronously. Students will be directed to various media resources relevant to their day to day following and awareness of the activities of the global financial markets.

#### **BEHAVIOURAL ECONOMICS (ECON251)**

#### Credits: 15 / Semester: semester 2

An optional module addressing the interaction of Economic Theory with Psychology and investigating the way in which psychological findings can inform economics. This module will be useful in preparation for third year modules in Behavioural Finance and in the Economics of Arts and Culture.

#### FINANCIAL MANAGEMENT (ACFI204)

#### Credits: 15 / Semester: semester 1

The module aims to introduce students to the modern theory of finance and financial management. Theoretical concepts like the net present value, decision making under uncertainty, portfolio selection and the capital asset pricing model are introduced. These concepts serve as prerequisites for investment and financing decisions which are exemplified by an analysis of valuation of firms, capital structure decisions and dividend policy. More specifically, the topics covered are the value and capital budgeting, portfolio theory, models of security valuation, efficient markets, long-term financing, company dividend decisions, capital structure, and interactions of investment and financing decisions. In all cases contemporary examples will be used to make theory come to life.

Programme details and modules listed are illustrative only and subject to change.

## **YEAR THREE**

The third year of your programme is spent on placement. You will complete a year-long graduate-level placement, providing valuable work experience and an opportunity to further enhance the skills and attributes sought after by top employers.

You can apply for UK-based placements with a large organisation or smaller company or even seek a placement overseas. You will be visited at least twice by University staff whilst on placement with support from the Placement Team throughout and complete related assessments in May. Further information about the <u>year in industry</u> is available on the Management School website.

## **COMPULSORY MODULES**

#### ULMS PLACEMENT YEAR (ULMS299)

#### Credits: 120 / Semester: whole session

The placement experience is not just about gaining work experience, it is also about developing as a more nuanced and sophisticated practitioner. Throughout the placement you will examine current business theory through the lens that is your personal experience and develop real insight into how theory and practice fit together. The less sophisticated try and force theory to work where it won't or simply abandon it altogether. This module will help you develop an understanding of the role of theory in your personal practice enabling you to target your effort more effectively.

Programme details and modules listed are illustrative only and subject to change.

## YEAR FOUR

In your final year you will take more advanced economics modules and have the opportunity to apply what you have studied to contemporary issues. You can also choose from a range of optional modules depending on your pathway, strongly supported by the topical research carried out by our academics, so you can specialise in the areas that are of the greatest interest to you and your future aspirations.

In year four, students on all pathways must take ECON342 in semester one.

Students on the Economics pathway must take either ECON343 or ECON346 in semester two. ACFI321, ECON310 are not available on this pathway.

ECON304, ACFI322 are only available on the Finance pathway.

ECON308, ECON317 and ECON311 are compulsory modules for Data and Econometrics pathway. ECON306 is available as an optional module on this pathway only.

## **COMPULSORY MODULES**

## **ADVANCED MICROECONOMICS (ECON342)**

## Credits: 15 / Semester: semester 1

This is a third year advanced module in microeconomic theory focussed on the study of asymmetric information environments. In the seminar/tutorial students will be expected to present and discuss additional material as well as solve exercises.

#### QUANTITATIVE FINANCIAL ECONOMICS (ECON308)

#### Credits: 15 / Semester: semester 1

This module provides a broad introduction to essential topics in modern financial economics, which crucially includes decision-making under uncertainty, portfolio selection, pricing financial assets and state contingent claims, and forecasting asset returns and volatility from historical data. In addition to offering students necessary exposure to essential knowledge in the aforementioned topics, this module also aims to develop two essential analytical abilities, namely the ability to formulate real world decision problems into mathematically solvable optimization questions and the ability to solve formulated questions either analytically or numerically. Students will gain exposure to such knowledge and develop such analytical abilities from properly selected examples and problem sets to be discussed in lectures and tutorials.

#### METHODS OF ECONOMIC INVESTIGATION 2: MICROECONOMETRICS (ECON312)

#### Credits: 15 / Semester: semester 1

The module will introduce a series of key advanced techniques in microeconometrics, building on second year work in econometrics. It covers typical topics such as binary choice models including logit and probit models, count data models which is widely used to deal with integer variables as well as panel data models. The module will develop applied research skills, including the ability to analyse data using appropriate econometric techniques and bespoke software. Successful students at the end of the module will be expected to be equipped for study at leading graduate schools of Economics and for work as professional economists or business analysts.

#### ADVANCED MACROECONOMICS (ECON343)

#### Credits: 15 / Semester: semester 2

This module is designed for Economics students who wish to advance further their understanding of modern macroeconomic analysis. The module considers a number of macroeconomics topics at a more advanced level and in greater depth. Why do countries grow? What are the sources of recessions and booms? Why is there unemployment and what determines its extent? What are the sources of inflation? How do government policies affect output, unemployment, inflation and growth?

#### **APPLIED INTERNATIONAL MACROECONOMICS (ECON346)**

#### Credits: 15 / Semester: semester 2

What is globalisation? How does it constrain or enable economic policy making? This module follows on from the intermediate coverage of macroeconomics in year 2 and develops the interpretation of economic theory in a global economic context.

In this course we consider different exchange rate régimes and how they relate to the balance of payments and the scope for policy design.

The euro zone and the euro crisis present uswith a multilateral exchange rate peg between differing economies. We will study the nature and history of such arrangements before discussing the nature of its current European incarnation.

Finally, we will relate abstract models to empirical applications and ask where to obtain real world data to inform theory driven debates. As an alternative to the Advanced Macroeconomics module on the BSc Economics programmes, this module puts less emphasis on the in-depth development of formal model representations, although an appropriate amount of formal modelling is still used. Instead, it widens the focus of the discussion and emphasises the applied dimension.

#### METHODS OF ECONOMIC INVESTIGATION 1: TIME SERIES ECONOMETRICS (ECON311)

#### Credits: 15 / Semester: semester 2

This module aims to offer students the opportunity to learn basic econometric theories for time series analysis. The module will build upon the materials of ECON212 Basic Econometrics but make important extensions in order to model serial dependence in time series data. This module will introduce the classic ARIMA type of linear time series modelling framework and the classic ARCH/GARCH type conditional heteroskedasticity modelling framework as well as ARDL type multivariate time series model and cointegrated systems. Upon successful completion of this module, students should be able to apply these classic models to univariate and/or multivariate time series data for the purposes of, for example, producing economic/financial forecasts and/or investigating causal relationships between multiple economic/financial variables.

#### ADVANCED ECONOMETRIC METHODS: DATA PROJECT (ECON317)

#### Credits: 15 / Semester: semester 2

This module aims to build on year 2 econometrics (ECON212 & ECON213) by understanding advanced techniques that are used in applied econometrics. Specifically, in this module several advanced econometric topics will be covered, and students will be asked to read and critically assess recent published and/or working papers on modern economic/ econometric research and to replicate their techniques in an assessed data project. By completing the module students are expected to acquire a good knowledge of how econometric research and data projects are conducted and gain experience of applied econometrics by completing an individual data project.

## **OPTIONAL MODULES**

#### **BEHAVIOURAL FINANCE (ECON321)**

#### Credits: 15 / Semester: semester 2

Behavioural finance attempts to explain several widely cited market phenomena (including e.g. excess volatility, overreaction, bubbles and crises) by drawing on concepts and principles from psychology and their applications in investors' behaviour. The module provides a thorough introduction to this area, with theoretical analyses being enhanced through the use of quantitative financial data.

#### **CREATIVE SECTOR ECONOMICS (ECON362)**

#### Credits: 15 / Semester: semester 1

The creative sector of the economy rivals the financial services sector in size in the UK. This module first provides context for the sector in both the UK and globally. It then explores the application and development of economic theory in a sector which is often characterised by 'non-standard' markets (i.e. markets where neoclassical microeconomic assumptions may not hold) such as: Insubstitutability of labour for capital; superstar labour markets; intangible property of copyrights; fundamental measures of economic 'value'; demand under utility models influenced by taste formation and differing levels of public sector influence. It is applied by examining a variety of creative industries, including fine arts, music, broadcasting, movies and others.

#### ECONOMICS OF BANKING (ECON323)

#### Credits: 15 / Semester: semester 2

The aim of this module is to address the following and related questions: 1) What distinguishes banks from other firms? 2) What determines their behaviour when they set interest rates and extend loans? 3) What is their role in the economy? 4) Why is banking subject to a long list of specific regulations? 5) How is monetary policy transmitted through the banking system? 6) Why do banking crises occur and what are their consequences for the macroeconomy? The module covers both microeconomic and macroeconomic issues. It has points of connection to modules on industrial organization, finance and monetary policy.

#### FINANCIAL CRISES AND DEFAULTS (ACFI319)

#### Credits: 15 / Semester: semester 1

The module will introduce students both to the theoretical arguments and the empirical evidence related to financial crises and defaults. The module will discuss in detail the main aspects of the recent financial crisis that shook the world economy including (a) the economic and financial environment in the years just before the crisis, (b) the causes of the crisis and (c) the action taken by policy-makers to deal with the crisis. The module will proceed by discussing the main aspects of the recent Eurozone debt crisis, as well as GREXIT and BREXIT issues. Noting the increasing role of social media both in becoming a popular open forum for analysing economic issues and reflecting public sentiment minute by minute, the module will draw on recent academic work to explain the impact of #Grexit tweets on the Eurozone bond market over and above the impact of economic fundamentals.

Some of the module content will be applied. In particular, using the econometric software EVIEWS and a number of macroeconomic and financial datasets, case studies will be developed to (a) test the adverse impact of excessive debt on economic growth for the G7 economies and (b) provide an empirical assessment of whether financial assets become mispriced prior, during and after financial crises. Students taking this module will need to have basic knowledge of macroeconomic and statistical theory as well as very basic knowledge of simple regression analysis. Prior knowledge of EVIEWS is not essential. A short introduction to EVIEWS will be offered as part of the module.

## QUANTITATIVE FINANCIAL ECONOMICS (ECON308)

#### Credits: 15 / Semester: semester 1

This module provides a broad introduction to essential topics in modern financial economics, which crucially includes decision-making under uncertainty, portfolio selection, pricing financial assets and state contingent claims, and forecasting asset returns and volatility from historical data. In addition to offering students necessary exposure to essential knowledge in the aforementioned topics, this module also aims to develop two essential analytical abilities, namely the ability to formulate real world decision problems into mathematically solvable optimization questions and the ability to solve formulated questions either analytical abilities from properly selected examples and problem sets to be discussed in lectures and tutorials.

## GAME THEORY (ECON322)

#### Credits: 15 / Semester: semester 1

The objective of this module is to provide an introduction to Game Theory. This is the study of strategic interactions i.e. situations where outcomes depend not only on our own actions but also on how others react to our actions. This module complements those in core macro and microeconomics and offers more insight into strategic business decisions and competitive behaviour in general. In particular, we will use game theory to study market competition, auctions, bargaining, signalling, etc.

#### INTERNATIONAL TRADE (ECON335)

#### Credits: 15 / Semester: semester 1

This module aims to develop a good understanding of the main trade theories, their assumptions, implications, applications and limitations, and provide essential skills to students to engage in an analytical discussion of the impact of trade patterns, trade policies of government, foreign direct investment and World Trade Organisation on the economies of both developing and developed countries.

#### **ISSUES IN DEVELOPMENT FINANCE (ACFI317)**

#### Credits: 15 / Semester: semester 1

This module will provide an advanced, albeit non-technical, critical understanding for students with a variety of academic backgrounds of a number of current issues faced by both academics and practitioners in the area of finance for development. These will include, for example, trying to answer the question of whether foreign aid works, the impact of multinational firms upon the economy of host countries, the evolving roles of the IMF and World Bank and whether microcredit really provides a "silver bullet" solution to poverty. The module will also cover the main principles of Islamic Finance. This a very strongly researchled module. Finally, the module will have a developmental form of assessment in the form of a research-based proposal for a new textbook that will allow students to revisit the knowledge they have acquired in the module from a perspective of their choice like, for instance, de-colonisation of the curriculum, sustainability, environment, fintech, financial inclusion, gender.

#### METHODS OF ECONOMIC INVESTIGATION 2: MICROECONOMETRICS (ECON312)

#### Credits: 15 / Semester: semester 1

The module will introduce a series of key advanced techniques in microeconometrics, building on second year work in econometrics. It covers typical topics such as binary choice models including logit and probit models, count data models which is widely used to deal with integer variables as well as panel data models. The module will develop applied research skills, including the ability to analyse data using appropriate econometric techniques and bespoke software. Successful students at the end of the module will be expected to be equipped for study at leading graduate schools of Economics and for work as professional economists or business analysts.

#### METHODS OF ECONOMIC INVESTIGATION 1: TIME SERIES ECONOMETRICS (ECON311)

#### Credits: 15 / Semester: semester 2

This module aims to offer students the opportunity to learn basic econometric theories for time series analysis. The module will build upon the materials of ECON212 Basic Econometrics but make important extensions in order to model serial dependence in time series data. This module will introduce the classic ARIMA type of linear time series modelling framework and the classic ARCH/GARCH type conditional heteroskedasticity modelling framework as well as ARDL type multivariate time series model and cointegrated systems. Upon successful completion of this module, students should be able to apply these classic models to univariate and/or multivariate time series data for the purposes of, for example, producing economic/financial forecasts and/or investigating causal relationships between multiple economic/financial variables.

#### THE ECONOMICS OF DEVELOPING COUNTRIES (ECON306)

#### Credits: 15 / Semester: semester 2

This is an introductory module to the economics of international development. It introduces students to conceptual and methodological issues within international development and provides a solid grounding in various models of economic growth and development. It builds an understanding of various contemporary issues in this area and develops critical and analytical skills in analysing the problems of developing countries. From this perspective, it is designed to prepare students for a master's course in international developing countries to their chosen field of work.

## CAPITAL MARKETS (ACFI321)

#### Credits: 15 / Semester: semester 2

The course objective is to present the current capital markets with a blend of the theoretical with the practical. Our examination will extend beyond the traditional financial products, equity and debt instruments, to recent innovations. Until the summer of 2007, capital markets had experienced spectacular growth via a proliferation of new products. In keeping with classic economic theory, the investment rewards of products such as securitization were inevitably accompanied by risks as recent events brought to light. New products like assetbacked securities and Electronic Traded Funds will be reviewed and identified by investor profile and investment rationale.

## **DERIVATIVE SECURITIES (ECON310)**

#### Credits: 15 / Semester: semester 1

Derivatives have become increasingly important financial instruments in progressively complex contemporary global financial markets. This module provides the opportunity for an in-depth exploration of derivatives involving both a practical and theoretical approach. The course builds from basic definitions and properties of 'put' and 'call' options, 'forwards', 'futures' and exotic derivative contracts. A number of analytical tools are used such as payoff diagrams to help establish determinants of derivatives values and pricing relationships between different types of derivatives in arbitrage, hedging and speculation.

#### CONTEMPORARY ISSUES IN ECONOMIC POLICY (ECON330)

#### Credits: 15 / Semester: semester 1

This module aims to give students a broad understanding of the key contemporary issues faced by political institutions and policymakers in the United Kingdom and in an international context. The module will analyse key challenges faced by democratic institutions around the world as well as by policymakers in the areas of education, labour and health. The module will also briefly cover the present and future challenges presented by Brexit and the policy reactions to the COVID-19 pandemic. Finally, the module will assess the contribution that Economics as a discipline can offer to tackle the challenges presented by environmental changes and congestion. The module will allow students to apply theoretical concepts to real life challenges

#### HEALTH ECONOMICS (ECON326)

#### Credits: 15 / Semester: semester 2

The aim of this module is to introduce final year Economics students to the key principles and tools of health economics. The module aims to show how the health care system differs from the economic textbook model of perfectly competitive markets. It will offer an overview of the issues of demand and supply for health care, supplier-induced demand, equity and inequality, health care financing and health insurance. It will emphasize the use of economic evaluation for assessing health care interventions as a way of making informed decisions in terms of costs and benefits. In addition, a range of practical examples will be provided of how health economics is applied in practice in both resource rich and resource poor countries.

## SPORTS ECONOMICS (ECON328)

#### Credits: 15 / Semester: semester 2

This module critically explores the economics of the sports sector, in particular the market for professional team sport. Over the past number of years, the sports sector has grown in social and economic significance, however, in some instances, there are peculiar aspects that merit economic inquiries. For example, collusion and collaboration between firms are generally prohibited, however, professional clubs organised in leagues are able to engage in collusive behaviour. At the same time, sports markets have many characteristics that make it particularly relevant to test general economic theories.

The aim of this module is to apply economic theories and principles to enhance knowledge and understanding of the sports sector and its constituent markets, and to use sports markets to understand general economic theories. The module will critically explore a range of issues and in doing so will make use of econometric modelling. Therefore, students will be able to develop an informed view of how an analytical view of sports can be used to guide decision making.

#### **APPLIED INTERNATIONAL MACROECONOMICS (ECON346)**

#### Credits: 15 / Semester: semester 2

What is globalisation? How does it constrain or enable economic policy making? This module follows on from the intermediate coverage of macroeconomics in year 2 and develops the interpretation of economic theory in a global economic context. In this course we consider different exchange rate régimes and how they relate to the balance of payments and the scope for policy design.

The euro zone and the euro crisis present uswith a multilateral exchange rate peg between differing economies. We will study the nature and history of such arrangements before discussing the nature of its current European incarnation.

Finally, we will relate abstract models to empirical applications and ask where to obtain real world data to inform theory driven debates. As an alternative to the Advanced Macroeconomics module on the BSc Economics programmes, this module puts less emphasis on the in-depth development of formal model representations, although an appropriate amount of formal modelling is still used. Instead, it widens the focus of the discussion and emphasises the applied dimension.

## ADVANCED MACROECONOMICS (ECON343)

#### Credits: 15 / Semester: semester 2

This module is designed for Economics students who wish to advance further their understanding of modern macroeconomic analysis. The module considers a number of macroeconomics topics at a more advanced level and in greater depth. Why do countries grow? What are the sources of recessions and booms? Why is there unemployment and what determines its extent? What are the sources of inflation? How do government policies affect output, unemployment, inflation and growth?

#### INDUSTRIAL ORGANISATION (ECON333)

#### Credits: 15 / Semester: semester 2

Industrial organisation is concerned with the economic analysis of firms and industries, with a particular focus on how well consumers (society) are being served by particular industry structures and firm actions. The module incorporates debate between alternative schools of thought. The coursework is based on an industry case study selected by each student, which they research and which develops skills of independent research, writing, analysis and critical appraisal. In particular students are asked to evaluate which school of thought provides the most plausible interpretation of firm strategies and market outcomes.

#### ADVANCED ECONOMETRIC METHODS: DATA PROJECT (ECON317)

#### Credits: 15 / Semester: semester 2

This module aims to build on year 2 econometrics (ECON212 & ECON213) by understanding advanced techniques that are used in applied econometrics. Specifically, in this module several advanced econometric topics will be covered, and students will be asked to read and critically assess recent published and/or working papers on modern economic/ econometric research and to replicate their techniques in an assessed data project. By completing the module students are expected to acquire a good knowledge of how econometric research and data projects are conducted and gain experience of applied econometrics by completing an individual data project.

#### ENVIRONMENTAL ECONOMICS AND SUSTAINABILITY POLICIES (ECON315)

#### Credits: 15 / Semester: semester 2

This module introduces the main insights of environmental and ecological economics and discusses the development of sustainability policies. The interrelated nature of environmental, social, and economic systems is analysed together with the main theories and tools used to address some of the main sustainability constraints of the 21st century. The analysis of the mutual dependencies existing between the human and the ecological systems, together with the limits imposed by the natural resources constraints allows students to gain a critical understanding of the socio-environmental implications of economic activities.

Given the increasing demand for professionals able to use interdisciplinary perspectives for the resolution of real-world problems, the module will complement and integrate the critical abilities developed during the previous years of studies towards this aim.

Programme details and modules listed are illustrative only and subject to change.

## HOW YOU'LL LEARN

Modules are taught using the latest active learning techniques including business simulations, real-world case studies, social media, interactive participation software, lecture capture and real-time financial and business data using our Bloomberg Trading Floor. The principal forms of teaching are lectures and seminars with lectures normally being supported by material such as hand-outs and presentations.

Seminars give the opportunity for detailed discussion of a topic under the direction of a tutor. You are normally expected to prepare work in advance for seminars and may be expected to present work or give presentations from time to time. On some modules, such as quantitative techniques and IT, seminars may take the form of practical sessions using our PC suites.

All our degrees depend on you spending a good part of the week in private or group study in preparation for lectures and seminars. This involves making extensive use of the excellent library and IT facilities, just one minute's walk away from the Management School.

## HOW YOU'RE ASSESSED

You will be assessed through a combination of coursework and examinations. The exact weighting will vary from one module to another. As well as individual assignments and exams, you may also be assessed on group reports and presentations.

## LIVERPOOL HALLMARKS

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

# **Careers and employability**

Studying Economics with a Year in Industry at the Management School will provide you with very high level analytical and technical skills which will enable you and other students to work in multinationals, specialist finance and investment firms, government bodies and research organisations.

We're committed to enhancing employability and supporting you all the way to your future career. Our innovative Careers and Employability Service will be on hand throughout your time with us to help you prepare for life after graduation.

The average earnings for Economics with a Year in Industry graduates from the University of Liverpool Management School is £26,000 and many former students find successful careers in many professions such as Technology Risk Analyst, Trainee Chartered Accountant, Business Analyst, Operations Analyst in organisations including BDO, Capita, HRMC, IW Capital, KPMG and more.

Students are also encouraged to undertake a Year in Industry which is undertaken as part of the four-year sandwich degree programme. You will be supported in finding and applying for a placement in an organisation which could range from a local small and medium-sized enterprise to a global blue-chip company – the choice in yours!

Students completing undergraduate degrees at the University of Liverpool Management School often go on to undertake postgraduate programmes such as MSc Accounting and Finance, MSc Economics plus MSc Project Management.

## **4 IN 5** BUSINESS AND MANAGEMENT STUDENTS FIND THEIR MAIN ACTIVITY AFTER GRADUATION MEANINGFUL.

Graduate Outcomes, 2018-19.

# **Fees and funding**

Your tuition fee covers almost everything, but you may have additional study costs to consider, such as books, specialist equipment or field trips.

## **TUITION FEES**

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)		
Full-time place, per year	£9,250	
International fees		
Full-time place, per year	£23,200	

Fees are correct for the academic year 2024/25

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. <u>Learn more about</u> tuition fees, funding and student finance.

## **ADDITIONAL COSTS**

All students have the opportunity to spend a semester studying overseas during their second year, subject to your year one performance. If you elect to study abroad you will need to cover associated travel and living costs. University travel bursaries and subsistence grants are available.

Find out more about the <u>additional study costs</u> that may apply to this course.

## **SCHOLARSHIPS AND BURSARIES**

We offer a range of scholarships and bursaries to provide tuition fee discounts and help with living expenses while at university.

Check out our <u>Undergraduate Global Advancement Scholarship</u>. This offers a tuition fee discount of up to £5,000 for eligible students starting an undergraduate degree from September 2024. There's also <u>the Liverpool Bursary</u> which is worth £2,000 per year for eligible students.

# **Entry requirements**

The qualifications and exam results you'll need to apply for this course.

Your qualification	Requirements About our typical entry requirements
A levels	AAB Narrowly missed the entry requirements on results day? If you've studied these subjects, we may take them into account. You may automatically qualify for reduced entry requirements through our <u>contextual offers scheme</u> .
GCSE	GCSE Mathematics at grade 5/C and GCSE English at grade 4/C required. Applicants with equivalent qualifications and applicants who do not meet the GCSE English requirements will be considered on an individual basis according to their circumstances.
Subject requirements	A level Mathematics minimum grade A required. The A level requirement for Economics at 50% is grade A at A level Mathematics. Some Level 3 qualifications are only acceptable alongside 2 A levels, please <u>contact us</u> for details.
BTEC Level 3 National Extended Diploma	BTEC Diploma at D*D* plus A level Mathematics grade A. Or BTEC Extended Diploma at D*D*D plus A level Mathematics grade A. BTEC applicants without an A level should apply to N100, N120 or N500. BTEC qualifications must be in a Business related subject.
International Baccalaureate	35 points with no score less than 4 including 6 in Higher Level Mathematics – International Baccalaureate Mathematical

Your qualification	Requirements About our typical entry requirements
	Studies is not accepted for any Management School programme in lieu of GCSE Mathematics, or Higher Level Mathematics where this is a requirement
Irish Leaving Certificate	H1,H1,H2,H2,H2,H3, including H1 in Mathematics
Scottish Higher/Advanced Higher	Scottish Highers at AAB, including A in Mathematics.
Welsh Baccalaureate Advanced	Accepted including A or B at A Level including Maths
Access	45 credits at Distinction in graded level 3 units (to include a minimum of 15 Maths credits) in a relevant Diploma
International qualifications	Many countries have a different education system to that of the UK, meaning your qualifications may not meet our direct entry requirements. Although there is no direct Foundation Certificate route to this course, completing a Foundation Certificate, such as that offered by the <u>University of Liverpool</u> <u>International College</u> , can guarantee you a place on a number of similar courses which may interest you.

## **ALTERNATIVE ENTRY REQUIREMENTS**

- If your qualification isn't listed here, or you're taking a combination of qualifications, <u>contact us</u> for advice
- Aged 20+ and without formal qualifications? The one-year <u>Go Higher</u>

diploma qualifies you to apply for University of Liverpool arts, humanities and social sciences programmes

• <u>Applications from mature students</u> are welcome.



 $\ensuremath{\mathbb{C}}$  University of Liverpool – a member of the Russell Group

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