

**Kingston  
University**  
London

# **Business and Economic Forecasting MSc**

# **Applied Econometrics MSc**

**FACULTY OF ARTS AND SOCIAL SCIENCES**

[www.kingston.ac.uk/postgraduate/courses](http://www.kingston.ac.uk/postgraduate/courses)

## About the Business and Economic Forecasting MSc

### Course overview

Business and economic forecasting plays an important role in decision making in industry, financial services, commerce and government. In an uncertain environment, the success of a business or economic policy depends on the ability of managers to foresee and prepare for the future.

This course offers extensive training in forecasting and modelling techniques that have a range of applications in business, finance and the national economy. It will enable you to identify forecasting needs, choose appropriate forecasting methods and appreciate their limitations, and present forecasting reports.

This innovative course is ideal if you are keen to advance your career as an economic/business modeller or forecaster, or are working in a related area that would benefit from training in modelling and forecasting methods. In addition, if you are new to the labour market, the transferable skills you will learn on this course will greatly improve your potential for employment.

### What you will study

You will develop skills in the quantitative techniques that support planning and forecasting, equipping you with the essential theoretical and practical skills of modelling and forecasting. You will study the multiple linear regression model and explore its range of applicability as a modelling framework. You will also look at the wide range of approaches to forecasting used in the business environment and financial markets. In addition, you will explore how the macroeconomic climate affects businesses, and analyse the strengths and weaknesses of macroeconomic forecasts. You will also learn how to write professional forecasting reports.

### Careers

The taught modules on this course aim to prepare you for the job market, developing your skills in problem solving and organisation; data collation, review and synopsis; communication (oral, written and electronic); time management; computing; and co-operation and teamwork.

The MSc in Business and Economic Forecasting can lead to a range of career opportunities in a variety of areas; for example, from the City, large businesses, public service providers, local and central government, to research institutes and independent forecasting and consultancy units.

Students have also found this course to be a good preparation for PhD programmes in which quantitative economics investigation is an important feature of their research project.

See [www.kingston.ac.uk/pgbuseconfore](http://www.kingston.ac.uk/pgbuseconfore) to find out more.



## Course content

### Modules

The course comprises eight core modules and a dissertation.

#### Foundation Module

This module provides the mathematical and statistical basis for the Econometrics and Time-Series modules.

#### Econometrics

This module explores the multiple linear regression model and its range of applicability as a modelling framework. It also assesses the extent to which econometric methods are useful in forecasting.

#### Time-Series Methods

This module introduces you to the range of techniques used to produce forecasts from time-series data. The empirical work performed in this module will lead to the production of a time-series analysis and forecast as a professional report, and will enable you to conduct future research.

#### Computing

This module familiarises you with the ICT packages you will use in subsequent modules to support report writing and analysis. It also covers how to enhance standard software packages by writing dedicated additional programs.

#### Business Forecasting

This module explores the wide range of approaches to forecasting in the business environment. It deals with subjective approaches as well as extensions to the econometric methods covered earlier, and seeks to broaden the range of options open to business forecasters.

#### Business Forecasting Workshop

This module enables you to develop the techniques studied in the Business Forecasting module and to practise the research skills required for writing professional reports and your dissertation.

#### Macroeconomic Modelling and Forecasting

This module explores the theory and practice of macroeconomic modelling and forecasting: its historical development, current practice and the econometric methods that are important to it. As well as estimation methods, the module considers model solution techniques and methods for forecast evaluation.

#### Macroeconomic Modelling and Forecasting Workshop

Business forecasting takes place in the context of a specific macroeconomic climate. This module explores how the macroeconomic climate affects business, and analyses the strengths and weaknesses of macroeconomic forecasts.

#### Dissertation

Your dissertation is produced in consultation with a supervisor on a topic chosen by yourself and written over a 12-week period. Your dissertation is expected to be about 10,000 words in length. If you are working, you can use your own professional circumstances as research material, in consultation with your employers. Graduates often use the dissertation to demonstrate their professional development to future employers.

## Student feedback

### Alei Duan

Alei joined our Business and Economic Forecasting MSc (MBEF) course after studying accounting in China. On completing his MSc, he won a PhD studentship and then joined the Nationwide Building Society as a senior business analyst.

*"My MSc has equipped me with solid forecasting/modelling techniques and gave me the opportunity to stand out from hundreds of candidates to win the job at Nationwide."*

*"The MBEF course is pretty extensive, and the modules prepared me well for my job at Nationwide. As a practical forecaster, I see the theories, principles and methods that are taught in the MBEF programme being applied at work."*

*"In a highly competitive business environment such as the UK financial services, business and economic forecasting is becoming increasingly important in aiding decision-making."*

### Amalia Figueroa

*"After leaving Kingston, I worked as a revenue and business information analyst for Serco Docklands. Here I applied a lot of the stats learnt in my MSc course to analyse and forecast passenger traffic and revenue. I was then offered a position as a financial and data analyst in KPMG's Information Risk Management department – this role varies a lot depending on the client's requirement."*

*"I've no doubt that the Business and Economic Forecasting course has provided me with a wide range of skills and helped to provide practical and pragmatic solutions to solve clients' requirements."*

### Vina Theodorakopoulou

*"The MBEF helped me develop a range of forecasting (quantitative) techniques, and familiarised me with specialised ICT packages used in business and economic forecasting. In addition, the modules contributed towards improving my research skills while using a range of techniques to generate forecasts using time-series data. Extensions to the econometric methods were also introduced."*

*"My colleagues and I examined, among other things, the macroeconomic environment (using contemporary case studies) and its impact on businesses, as well as analysing the strengths and weaknesses of macroeconomic forecasts. Workshops, group tasks and presentations enabled us to cultivate both our communication and research skills."*

*"Having worked in the sectors of banking, marketing, media communications and research, I am currently lecturing and studying towards a PhD in economics."*

### Harkeerat Gill

*"I have learnt a tremendous amount and thoroughly enjoyed being in an academic environment again. It was one of the best years of my life so far."*

*"I have been working for the Royal Bank of Scotland as an analyst in Customer Analytics for about four weeks now... they started me on £35K. I am really enjoying it and would not have achieved this position without the knowledge and confidence gained from the MBEF programme. It is really exciting because they are rebuilding their analytics division and branching out into econometrics, and I can really see myself progressing up the ladder over the next few years. I am working among Cambridge graduates and I feel comfortable talking to them analytically. It's fantastic!"*



## About the Applied Econometrics MSc

### Course overview

This course is designed for students who have already studied economics or quantitative methods at undergraduate level and who wish to pursue a career or further study in which the application of statistical methods, particularly econometric methods, plays a large role. Examples of the application of statistical methods in the workplace could include:

- market research;
- evidence-based planning and policy advice; or
- financial modelling and forecasting.

### What you will study

Econometrics differs from more-general statistical analysis by its use of economic concepts and theories as a basis for empirical investigation. In this course we emphasise the potential for application of a broad range of econometric techniques and effective communication of empirical results, rather than the statistical theory upon which econometric methods are based.

## Course content

### Modules

#### Microeconometrics

Microeconometrics is distinguished from econometrics in general by its focus on finely disaggregated entities. It involves the analysis of samples of data on, for example, individuals, households, firms, farms, schools, or municipalities, provided the samples contain sufficient data to warrant statistical investigation. This module considers both the main properties of such data and the estimation and modelling techniques that are particularly suited for analysing them.

#### Financial Econometrics

Developments in financial markets are of more-general interest than is the case for most other markets. Furthermore, data on financial assets, eg prices and traded volumes of shares or currencies, are recorded at relatively high frequency – weekly, daily or even hourly. A variety of econometric topics relates to financial markets. These include event studies, modelling term structures, modelling and predicting volatility, capital asset pricing models, and tests for market efficiency. This module introduces you to a selection of such topics and the associated econometric techniques.

#### Econometrics

This module deals with the multiple linear regression model and explores its range of applicability as a modelling framework. It also assesses the extent to which econometric methods are useful in forecasting. As well as becoming familiar with these econometric concepts, you will practise their application to the study of economic data.

#### Time Series Methods

This module introduces you to the range of techniques used to produce forecasts from time-series data. The empirical work will lead to the production of a time-series analysis and forecast as a professional report, and will enable you to conduct future research.

#### Computing

This module familiarises you with the ICT packages you will use in subsequent modules to support report writing and analysis. It also covers how to enhance standard software packages.

#### Business Forecasting

This module explores the wide range of approaches to forecasting in the business environment. It deals with subjective approaches as well as extensions to the econometric methods covered earlier, and seeks to broaden the range of options open to business forecasters.

#### Business Forecasting Workshop

This module allows you to develop the techniques studied in the Business Forecasting module and practise the research skills required for writing professional reports and your dissertation.

#### Macroeconomic Modelling and Forecasting

This module considers the techniques and methods used to construct forecasting models for national economies. It looks at both the Cowles tradition of simultaneous structural equation models and the more recent Vector Autoregression (VAR) models.

#### Macroeconomic Modelling and Forecasting Workshop

This module allows you to practise the techniques needed when producing macroeconomic forecasts and writing professional forecasting reports.

#### Dissertation

Your dissertation is produced in consultation with a supervisor on a topic chosen by yourself and written over a 12-week period. If you are working, you can use your own professional circumstances as research material, in consultation with your employers.



- [www.kingston.ac.uk/pgbuseconfore](http://www.kingston.ac.uk/pgbuseconfore)
- [www.kingston.ac.uk/pgappliedeconometrics](http://www.kingston.ac.uk/pgappliedeconometrics)

## Teaching staff

**Nick Butler** is head of the School of Economics and principal lecturer. Nick teaches the Computing module and his specialist subjects are: applied statistics, econometrics, information management and IT, and research design and methodology.

**Professor Vince Daly** is a professor of economics. Vince teaches the Macroeconomic Modelling and Forecasting module. His specialist subjects are: computing for economics, applied econometrics and macroeconometrics. His recent publications include:

- with Hong Li (2009): Testing the balanced growth hypothesis: Evidence from China. In: *Empirical Economics*; and
- with Subrata Ghatak and Monica Pop Silaghi (2009): Trade and migration flows between some CEE countries and the UK. In: *Journal of International Trade and Economic Development*.

**Dr Elena Fitkov-Norris** is principal lecturer in the Faculty of Business and Law. Elena teaches the Business Forecasting module. Her specialist subjects are: control theory, cellular wireless networks and system dynamics.

**Dr Hong Li** is a senior lecturer in the School of Economics. Hong teaches the Time Series Methods module and Business Forecasting Workshop. Her specialist subjects are: economics of development, growth theory, corporate finance and quantitative methods. Her research interests are the empirical economics of development and empirical finance. Her recent publications include:

- with S Lin (2011): Do emerging economies matter in the world oil pricing system? Evidence of Imported Crude by China and India. *Energy Policy*;
- with Ewa Majerowska (2008): Testing Stock Market Integration for Poland and Hungary: a Multivariate GARCH Approach. *Research in International Business and Finance*; and
- (2007) International linkages of the Chinese stock exchanges: a multivariate GARCH approach. *Applied Financial Economics*.

**Dr José R Sánchez-Fung** is a senior lecturer in economics. Specialist subjects and research interests include: applied macro- and monetary economics, development economics and policy, and the measurement of fiscal and monetary policies.

**Dr Jalal Siddiki** is a senior lecturer in economics. Jalal teaches the Macroeconomic Modelling and Forecasting module. His specialist subjects and research interests include: liberalisation and economic growth, Ricardian Equivalence Theory, unofficial foreign exchange markets, applied econometrics, development economics and macroeconomics. His recent publications include:

- (2010): The Richardian equivalence hypothesis: Evidence from Bangladesh. *Applied Economics*.
- with Vince Daly (2009): The Twin Deficits in OECD Countries: Cointegration Analysis with Regime Shifts. In: *Applied Economics Letters*.

## Special features

- These courses provide training in forecasting and modelling techniques, and will enable you to identify forecasting needs and choose appropriate methods.
- The workshops enable you to put the techniques that you have learnt into practice.
- Your dissertation can be based on your professional circumstances in consultation with your current employer, or you can use it to demonstrate your professional development to future employers.
- We offer flexible timetables and part-time options to help you fit your studies around other commitments.
- These courses can also help prepare you for PhD research.



■ [www.kingston.ac.uk/pgappliedeconometrics](http://www.kingston.ac.uk/pgappliedeconometrics)

■ [www.kingston.ac.uk/pgbuseconfore](http://www.kingston.ac.uk/pgbuseconfore)

## Applied Econometrics MSc

### Business and Economic Forecasting MSc

#### Entry requirements

##### One or more of the following:

- A second-class degree or above, or equivalent, in economics or another area where quantitative methods or economics have been studied to an appropriate standard
- Extensive relevant professional experience

Consideration is also given to non-standard entrants, and all applicants are normally invited for interview by the course director or a senior member of the teaching team.

#### International students

All non-UK applicants must meet our English language requirements. For this course it is IELTS of 6.5 overall, with special conditions for students who require a Tier 4 student visa. Please make sure you read our full guidance about English language requirements on the course webpage, which includes details of other qualifications we'll consider.

#### Prior Learning – AP(E)L

Applicants with prior qualifications and learning may be exempt from appropriate parts of the course in accordance with the University's prior-learning policy.

#### Duration

One year full time or two years part time

#### Attendance/delivery

Most of the modules in the course are taught in three-hour sessions using a range of teaching and learning methods, such as lecture/seminar and/or lecture/computing combinations.

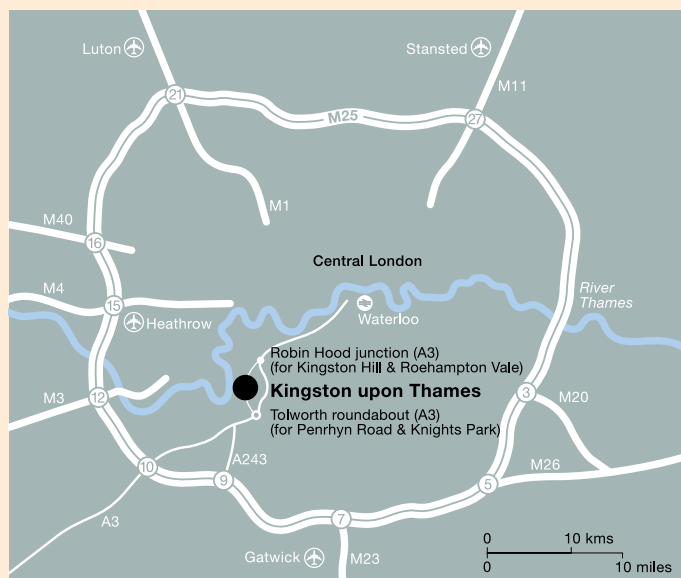
The study commitment may include evening, weekend or day-release sessions and can vary from semester to semester. Timetables are subject to change. Please contact the postgraduate admissions office for further details.

#### Assessment

These courses employ a variety of assessment methods, which may include essays, small research reports, practical exercises and formal examinations, as well as the final dissertation.

## Location

Located beside the River Thames, Kingston University is within the London travel-pass zone. Easily accessible from surrounding areas such as Surrey and Middlesex, its local train stations (Kingston; Surbiton) are also only 25 minutes from London Waterloo.



## Further information

#### Contact details

Please contact the Faculty's Admissions Office with any further queries.

Admissions Office (Postgraduate Courses)  
Faculty of Arts and Social Sciences  
Kingston University  
Penrhyn Road  
Kingston upon Thames  
Surrey KT1 2EE

T: +44 (0)20 8417 2361/2378

F: +44 (0)20 8417 2292

E: [fasspostgrad-info@kingston.ac.uk](mailto:fasspostgrad-info@kingston.ac.uk)

[www.kingston.ac.uk/pgbuseconfore](http://www.kingston.ac.uk/pgbuseconfore)

[www.kingston.ac.uk/pgappliedeconometrics](http://www.kingston.ac.uk/pgappliedeconometrics)