

Hands-on course

The Fundamentals of Forecasting



Business Forecasting with Causal Regression Methods

Lancaster University
January 19-20, 2015



Who we are



Lancaster Centre for Forecasting

- Largest research unit dedicated to forecasting in Europe
- Centre based at top ranked Lancaster University Management School
- Offer professional training, coaching and consultancy
- Over 50+ corporate projects
- Hosts of UK Supply Chain Forecasting Network

Prof. Robert Fildes

- Past president of the IIF - International Institute of Forecasters
- Founding editor of Journal of Forecasting & Int. Journal of Forecasting
- Distinguished Professor, Management Science, Lancaster University



Dr. Nikolaos Kourentzes

- Invited speaker at practitioner and academic conferences
- Long experience in applied research forecasting projects with industry
- Assistant Professor, Management Science, Lancaster University



Dr. Nicos Pavlidis

- Invited speaker at practitioner and academic conferences
- Long experience in the fields of statistics, data mining, and machine learning
- Assistant Professor, Management Science, Lancaster University

Who should attend

- Brand/Product Manager
- Business Development Manager
- Call Volume Forecaster
- Chief Procurement Officer
- CEO
- CPMR
- Demand Manager/Planner/Analyst
- Distribution Director/Manager
- ERP Administrator
- Forecast Analyst
- Forecast Manager
- Forecasting & Planning Director/Manager
- Inventory Director/Manager
- Lead Time Forecast Manager
- Load Forecaster
- Marketing Director/Manager
- Operations Manager
- New Product Director/Manager
- Planning Professional
- Procurement Professional
- Production Director/Manager
- Research Director/Manager
- S&OP Director/Manager
- Sales Director/Manager
- Strategic Planner
- Supply Chain Director/Manager
- VP of Forecasting
- VP of Sales
- VP of Supply Chain Planning
- Warehouse Manager

Testimonials

"The Lancaster forecasting course is a well organised programme with a variety of tutors, and a relaxed method of teaching and group discussion. The course content includes practical application through exercises and case studies relevant to real world issues. Attending two separate workshop sessions allowed us to implement lessons from the first workshop and report back to tutors and fellow delegates at the second. We are now in a good position to further develop our forecasting methodology and improve forecast accuracy at British Gypsum Ltd."

Russell Trueman, British Gypsum, UK

"... excellent course which will make an important difference on how we work ..."

Chris Tracey, UK Department of Work and Pensions DWP

"... The results of the workshop are brilliant, and I will definitely take a lot of information away with me and most importantly implement the models & parameters ..."

Demand Planner, Beiersdorf, Germany

Business Forecasting with Causal Regression Methods

2-day course to give practicing forecasters

- the skills necessary to improve their performance & knowledge in the key areas of commonly used forecasting models
- how forecasting can best be organised in a company
- how best to evaluate forecasts
- how to choose methods, functions and appropriate software
- how to continuously improve forecasting accuracy and bias

Course structure: 1 workshop module of 2 days

- small groups (8-10 people) & skilled instructors
- presentations and group discussion
- hands-on experience in analysing your own data
- use of Excel & advanced forecasting packages
- support knowledge transfer to your forecasting problems

Aims & Structure

Forecasting: Why is it important?

Understand the forecasting objects and objectives, the *Forecasting Process* and draw upon best practices.

Time series and causal variable analysis: What drives your demand?

Explore your data and identify time series predictable structure like trend and seasonality. Discover and estimate causal effects for your data.

Forecasting: How to forecast using external drivers?

Construct regression models for forecasting and capture the dynamics of your data, external drivers as well as special events and new policies.

Evaluate forecasting accuracy: Are your forecasts accurate?

Comprehend the different accuracy measures and their importance. Develop processes for improving and monitoring your accuracy.

Judgement in forecast: What are the limits of statistical causal models?

Recognise when to use judgemental adjustments in your forecasts and how to best apply them in practice.

Learning Objectives

Why choose the Lancaster Centre for Forecasting?

- + **Professionalism:** Courses are designed and taught by professional educators, with many years of teaching experience in developing courses, defining learning objectives and learning modes up to university level. Don't get caught in a course run by practitioners or consultants with little teaching experience.
- + **Expertise:** All trainers are experts in their respective areas of forecasting, both on the latest level of theoretical research but also implementing it in real projects with leading multinational companies. This ensures you can always transform the results of our latest theoretical research into practice.
- + **Course Design:** Guaranteed small teaching groups of approx. 8-10 students, in contrast to 20-40 in other courses. This allows us to work with you hands-on using real data, running resource intensive hands-on exercises in MS Excel and specialised forecasting tools. A mere call to bring along your laptop with support from trained staff.
- + **Resources:** In addition to presentation material handouts and MS Excel template-solutions including popular forecasting methods (readily implemented for you to use outside the course), each participant will receive a complimentary copy of the latest forecasting book **Principles of Business Forecasting** by Professors Robert Fildes (a course leader) and Keith Ord.

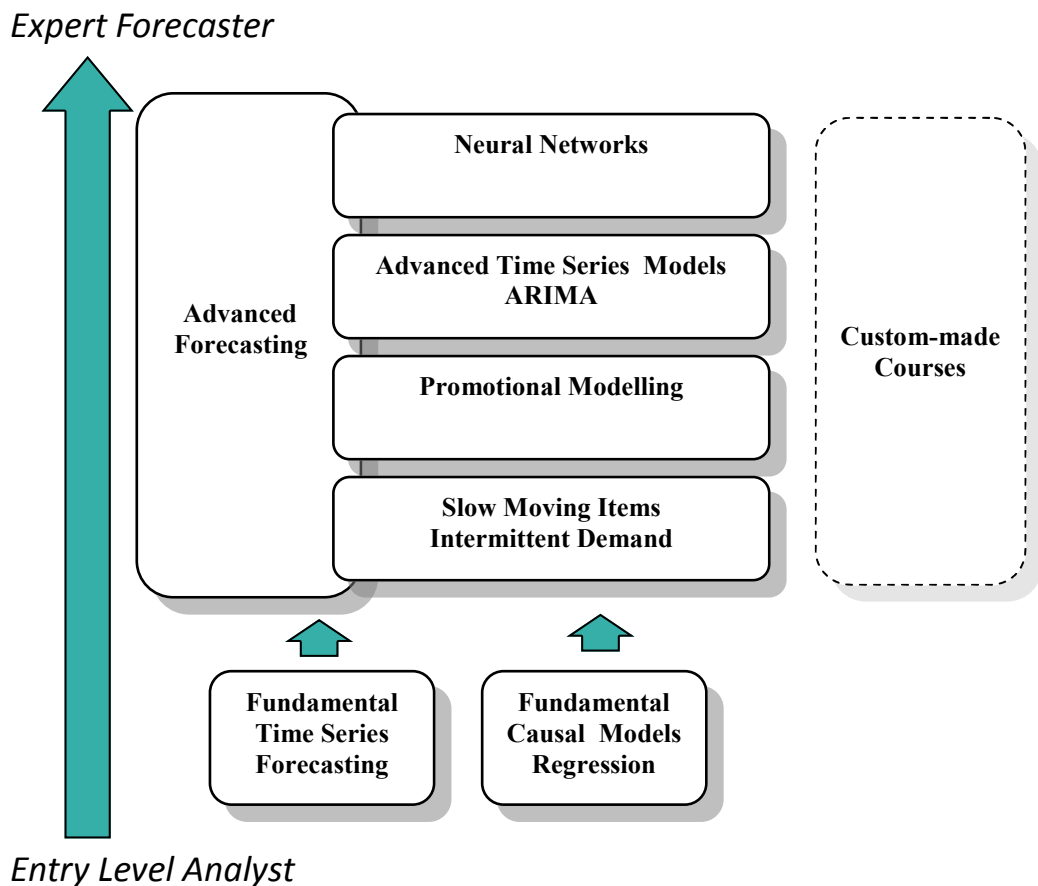
Course's location & cost

- Lancaster University, Lancaster—2:30 trip from London by train.
 - **£1,250.00** per participant (excluding VAT): includes 1 module of 2 days (9:00-17:00), hand-out materials, lunches/coffee/tea.
 - We are offering attractive team discounts. **Please, contact us!**
- We can also offer this training course at your premises for groups of 5+ trainees.
- Reserve your place at:
<http://www.lancaster.ac.uk/lums/forecasting/services/forthcoming-courses/>

Location & Cost



Your road to expertise



Fundamental Forecasting Courses

Business Forecasting with Time Series Methods: Learn how to understand and forecast your time series. This two-day course is an ideal introduction to forecasting. You will learn how to explore and analyse your data, build robust and accurate time series models and understand your forecasting performance.

Business Forecasting with Causal Regression Methods: Learn how to create forecasts that capture driver variables. External effects, such as the weather, policy changes, promotions, etc can be captured and explored with regression. Understand how to build powerful forecasting models that can explain external influences to your time series in this two-day course.

Advanced Forecasting Courses

ARIMA Methods: Bring the power of time series models and regression together. Learn how to build and use for forecasting the powerful ARIMA models, with or without external effects.

Artificial Neural Networks Methods: Use state-of-the-art predictive models for your organisation. Learn how to build neural nets to accurately predict complex and nonlinear time series. Understand how to capture time series dynamics, external events and complex interactions with Neural Networks.

Slow Moving & Intermittent Demand Forecasting: Learn how to forecast slow moving items, spare parts and other intermittent time series for reliable inventory estimation and control.

Promotional Forecasting Methods: Specialised course on promotional modelling. Learn how to build and use advanced predictive models to best model and understand your promotions.

New Product Forecasting: Learn state-of-the-art forecasting methods to new product demand forecasting and the use of expert opinion and management judgment.

Custom-made Courses

Do you have special requirements for a course? Let us know! We will develop tailor made courses to meet the needs of your team. These can be held at Lancaster, or on-site on your own premises to reduce travel overheads. For example, we regularly teach courses tailor made for a particular software package.

In addition, the Lancaster Centre for Forecasting offers individual 1-to-1 training on the job, giving individual support to tackle new methods and systems in order to bring new team members up to a desired level of knowledge.