IB98E-15 Forecasting

26/27

Department
Warwick Business School
Level
Taught Postgraduate Level
Module leader
Katy Hoad
Credit value
15
Module duration
9 weeks
Assessment
25% coursework, 75% exam
Study location
University of Warwick main campus, Coventry

Description

Introductory description

Decision making is an important part of business and, indeed, of life in general. Every day we make choices using a combination of opinions, facts, and 'hard evidence' in order to try and achieve better outcomes. In an uncertain environment, the success of an organisation or a policy depends upon the ability of decision makers and managers to prepare for the future.

This module will give you a thorough introduction to the field of time series analysis and will equip you with a tool bag of quantitative techniques that you can use to make forecasts. You will learn enough theory about the different methods to enable you to make sensible decisions about the best techniques to use in any given situation. However, there will be a strong focus on the practical side of forecasting, the 'art', in order to make you competent users of standard techniques.

Module web page

Module aims

The module provides an introduction to some of the foundational and current quantitative forecasting methods, and its overall aim is to develop practical competence in their use and understanding of their strengths and weaknesses. The module looks at models for short term forecasting, as these illustrate all the basic principles of analysing, comparing and extrapolating

different models, while maintaining an understanding of the breadth and variety of different forecasting methods from quantitative to qualitative for a variety of forecast horizons.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Introduction to Business Forecasting, Time Series and their components
An introduction to some of the main foundational time series forecasting methods and diagnostics, for example: Autocorrelation Function, Regression with Time Series Data, Smoothing methods, The Box-Jenkins (Arima) Methodology...

Learning outcomes

By the end of the module, students should be able to:

- Research a relevant topic using available literature sources and present cogently and effectively at masters level.
- Demonstrate a firm understanding of the ideas and principles underlying the most commonly used time series forecast models and diagnostics.
- Comprehensively understand the relevant issues and measures available to aid selection of the most suitable models.

Indicative reading list

Reading lists can be found in Talis

Research element

The group work asks students to research a given topic in order to widen their understanding of business forecasting techniques and processes.

Subject specific skills

Apply and assess different forecast models to 'real' data sets, conducting a range of analyses using appropriate software.
Investigate 'real' data sets and be able to report on the findings from a piece of modelling and analysis in practical terms.

Transferable skills

Group working skills
Written communication skills
Numeracy and IT skills

Study

Study time

Type	Required
Practical classes	(0%)
Online learning (scheduled sessions)	9 sessions of 1 hour (6%)
Other activity	18 hours (12%)
Private study	49 hours (33%)
Assessment	74 hours (49%)
Total	150 hours

Private study description

Private study to include preparation for lectures/ seminars/ workshops and own reading

Other activity description

Practical class/workshop 9x2hr

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group D5

	Weighting	Study time	Eligible for self-certification
Assessment component			
Group coursework 1500 words	25%	19 hours	No
Reassessment component			

	Weighting	Study time	Eligible for self-certification
Individual assignment			Yes (extension)

Assessment component

Centrally-timetabled examination (On-campus)	75%	55 hours	No

- Answerbook Pink (12 page)
- Students may use a calculator

Reassessment component is the same

Feedback on assessment

Assessments are graded using standard University Postgraduate Marking Criteria and written feedback is provided. Feedback for individual essays includes comments on a marksheet. Overall percentage marks are awarded for examination performance and general examination feedback is provided to the cohort.

Past exam papers for IB98E

Availability

Courses

This module is Optional for:

- Year 1 of TIBS-N1N3 Postgraduate Taught Business Analytics