IB9CU-15 Data Analytics

26/27

Department
Warwick Business School
Level
Taught Postgraduate Level
Module leader
Zhongnan Xiang
Credit value
15
Module duration
9 weeks
Assessment
100% coursework
Study location
University of Warwick main campus, Coventry

Description

Introductory description

This module aims to equip students with the necessary knowledge and skills to understand, critique, and conduct quantitative financial accounting research.

Module web page

Module aims

By the end of the module, students should be able to design and execute valid and reliable quantitative financial accounting research projects, using critical, analytical, and technical skills acquired during the term. The priority of the module would be the ability to implement these methods. This involves writing code in STATA to perform these methods so the students understand what they are doing and how to do it.

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 Data Analytics

Data Types and Structures
Importing and Cleaning Data
Exploratory Data Analysis
Regression Analysis and Basic Econometrics
Text Data and Textual Analysis
Web Analytics and Data Scraping
Causal Inference: To Answer Quenstions in an Rigorous Way

Learning outcomes

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

- Demonstrate a general understanding of data analytics concepts and how data can be used to explore questions, identify patterns, and support decision-making.
- Demonstrate understanding of the role of programming languages such as R in facilitating data-driven analysis
- Approach problems analytically, interpret data outputs, and reflect on the strengths and limitations of different analytical approaches.

Indicative reading list

Reading lists can be found in Talis

Research element

This module will equip students with techniques for addressing real-world questions. It will not only expose them to how data can be used to answer such questions, but also provide them with theoretical frameworks to approach these questions in a rigorous and structured manner.

Interdisciplinary

The module will incorporate some interdisciplinary elements, from management and finance

Subject specific skills

Work with data in R, including basic techniques for importing, preparing, analyzing, and presenting data in a structured and reproducible manner.

Transferable skills

Communicate findings clearly through written and visual formats

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Study

Study time

Type	Required
Lectures	9 sessions of 1 hour (6%)
Seminars	9 sessions of 1 hour (6%)
Online learning (independent)	9 sessions of 1 hour (6%)
Private study	49 hours (33%)
Assessment	74 hours (49%)
Total	150 hours

Private study description

Self study to include preparation for assessment and pre-reading for lectures and seminars

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 A

	Weighting	Study time	Eligible for self-certification
Assessment component			
Individual Assignment 1	30%	22 hours	Yes (extension)
Reassessment component is the same			
Assessment component			
Individual Assignment 2 2000 word essay	60%	44 hours	Yes (extension)
Reassessment component is the same			

	Weighting	Study time	Eligible for self-certification
Assessment component			
Participation	10%	8 hours	No
Reassessment component is the same			

Feedback on assessment

Advice and feedback on project work will be given during seminars. Written feedback will be given on the submitted coursework.

Availability

There is currently no information about the courses for which this module is core or optional.