



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Quantitative Research Methods		
Module Code	UMADBK-15-M	Level	Level 7
For implementation from	2020-21		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Business & Law	Field	Accounting and Finance
Department	FBL Dept of Accounting Economics & Finance		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p><b>Educational Aims:</b> The aim of the module is to provide students with the research training sufficient to produce a quality quantitative Finance Dissertation. It introduces students to a range of statistical and econometric techniques that can be useful in empirical research in accounting and finance.</p> <p><b>Outline Syllabus:</b> The syllabus includes:</p> <ul style="list-style-type: none"> <li>-Introduction to research methods in finance</li> <li>-Discrete and continuous probability distributions, population and sample statistics</li> <li>-Estimation of distribution parameters and hypothesis testing</li> <li>-Correlation analysis and linear regression models</li> <li>-Linear time-series and forecasting models (AR, VAR, Optimal Forecast, Unit Root, Cointegration)</li> <li>-Non-linear time-series models (ARMA, EWMA, GARCH, and, time permitting, LDV)</li> <li>-Panel data</li> <li>-Simulation analysis</li> <li>-The ethical context of research</li> <li>-Developing a research proposal and planning a research project</li> <li>-Literature and database search and literature review</li> </ul> <p><b>Teaching and Learning Methods:</b> The aim of the module is to provide students with the knowledge of quantitative methods in finance and the research training sufficient to analyse financial data and produce a quality quantitative report, including Finance Dissertation. The module provides students with an introduction to a range of econometric techniques with a focus to financial</p>

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research questions. The module helps students acquire the research skills and ethical awareness needed to produce an empirical report in any area of accounting and finance. The teaching style gives emphasis to the application of quantitative techniques from a 'user perspective'. Students will be actively encouraged to make themselves familiar with the study skills web pages, and in particular to read widely around the subject matter. Active use will be made of the Blackboard facilities.

Scheduled learning includes lectures, practical classes and workshops

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion

Students will receive 3 hours of scheduled contact per week, one 2 hour lecture and a 1 hour workshop.

### Part 3: Assessment

The student is assessed in a formative manner in the tutorial setting where they will tackle various issues in the field of applied quantitative finance research methods and engage in some basic empirical research tasks. In terms of summative research, there are two tasks required.

The first (Component A) requires students to produce an independent piece of empirical research of no more than 1,500 words, which includes a review of literature. The second (Component B) requires students to carry out relevant quantitative analyses and write a report of no more 2,000 words.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component A	✓	40 %	Production of a research proposal (1500 words)
Written Assignment - Component B		60 %	Quantitative report (2000 words)
Resit Components	Final Assessment	Element weighting	Description
Report - Component A	✓	40 %	Production of a research proposal (1500 words)
Written Assignment - Component B		60 %	Quantitative report (2000 words)

### Part 4: Teaching and Learning Methods

On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Appreciate and apply key techniques in quantitative analysis	MO1
Understand and critically evaluate quantitative methods for research in finance	MO2
Apply and evaluate a range of statistical and econometric techniques using standard statistical and econometric packages	MO3
Analyse financial data and critically interpret the results	MO4
Engage in the planning of a structured independent research project and be able to communicate and write up the results of that project	MO5
Critically review the key empirical literature in the relevant finance area, and take into full account the ethical context of a research project	MO6

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Contact Hours	<b>Independent Study Hours:</b>	
	Independent study/self-guided study	114
	<b>Total Independent Study Hours:</b>	114
	<b>Scheduled Learning and Teaching Hours:</b>	
	Face-to-face learning	36
	<b>Total Scheduled Learning and Teaching Hours:</b>	36
	<b>Hours to be allocated</b>	150
	<b>Allocated Hours</b>	150
Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p><a href="https://uwe.rl.talis.com/index.html">https://uwe.rl.talis.com/index.html</a></p>	

### Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Finance [Sep][FT][Frenchay][1yr] MSc 2020-21

Finance [Sep][FT][BAV][1yr] MSc 2020-21

Finance [Sep][PT][Frenchay][3yrs] MSc 2019-20