

<b>Module code</b>	FIN7F5	<b>Level</b>	7
<b>Module title</b>	Quantitative Research Methods for Finance	<b>Credit value</b>	10
<b>Common/Core/Elective</b>	Core	<b>ECTS Credits</b>	5
		<b>Notional learning hours</b>	100
<b>Courses on which the module is taught</b>	MSc Finance, Investment and Wealth Management	<b>Teaching Period</b>	Spring/Autumn
	MSc Finance and Financial Technology		
	MSc Finance and Private Equity		
	MSc Finance and Real Estate Investment		

## 1. Module aims and objectives

The main objective of this module is to provide you with a solid understanding of the basic theoretical elements of research methods through applying basic quantitative methods data analysis including statistical methods necessary for basic financial econometrics analysis (and what they involve in practical terms. Focusing on conceptual understanding of the relevant descriptive and analytical applied statistics necessary for problem solving in the area of finance in general. This includes descriptive statistics, probability and distributions theories and basic estimation and hypothesis testing.

You will therefore be equipped with a good knowledge of the most commonly used research methods suitable for conducting your own original research for your final project. You will also develop your ability to critically appraise a finance-based project and carry out research activities with a good degree of autonomy in line with the ethical consideration of research.

The aims of this module are:

- To support you in producing a detailed, well developed quantitative based research project by the end of this course, and to be ready to proceed with all aspects of the research project, including data collection and analysis.
- To provide you with the necessary knowledge and understanding to critically appraise published research in the field of economics and finance.
- To equip you with the necessary skills and techniques to analyse, critically assess, and ethically consider the different types of tools to be used in conducting a research investigation.
- To enable you to assess the validity and reliability of research and consultancy

- studies carried out by others as well as assessing their data collection methods.
- To provide you with an overview of statistical testing from the practitioner's point of view, and to give the main econometric techniques, thereby enabling you to competently use these tools in final project and research work.

## 2. Learning outcomes

### **Decision-making (LO4):**

Formulate informed decisions based on statistical models in complex business and management situations.

### **Communication (LO5):**

Communicate a research proposal for a given question persuasively considering relevant and appropriate methods for multicultural and international audience i.

### **Discipline Skills (LO8)**

Combine and employ research methods and statistical models to address a specific research question.

## 3. Learning and teaching methods

Learning for this module will be achieved through interactive workshops coupled with self-guided learning. These sessions will introduce you to concepts and techniques illustrated with practical and current examples. You will also be expected to participate in class discussions and work through examples and exercises with the support of the lecturer. Also, there will be regularly scheduled computer labs. These sessions are intended to demonstrate the use of the econometric package EViews and its practical implementation.

Learning hours	
Directed learning	36 hours
Workshops/ seminar classes	36
Guided/Self-guided learning	64 hours
Total	100

## 4. Assessment, formative feedback and relative weightings

Assessment Research

Proposal Weight (%): 100%

**Word Count or Equivalent: 2500 words**

You will be required to investigate on a research question or problem related to finance and develop a research proposal. This will involve applying an appropriate type of research method by conducting a critical analysis of selected data, either cross sectional

or time series. With the use of relevant quantitative and statistical techniques, you need to establish the most appropriate relationships among the variables under study.

The summative assessment will be preceded by an opportunity to make a formative submission that will be followed by formative feedback.

Assessment tasks	LO4	LO5	LO8
Research Proposal	X	X	X

## 5. Indicative resources

### Required Reading

Woolridge J., (2019), "Introductory Econometrics: A Modern Approach", 7<sup>th</sup> edition. Cengage Learning.

Saunders, M., Philip Lewis, P., and Thornhill, A. (2019) Research Methods for Business Students, 8<sup>th</sup> Edition, Pearson, ISBN: 9781292208787 Anderson, D., Sweeney, D. J. et Al. (2020) Statistics for business and economics. 5<sup>th</sup> ed, Cengage, ISBN-13: 978-1473768451 Thomson Reuters Eikon

Platform: [www.eikon.thomsonreuters.com](http://www.eikon.thomsonreuters.com)