

MODULE DESCRIPTOR

Module Title

Quantitative Methods For Finance

Reference	BSM004	Version	10
Created	December 2023	SCQF Level	SCQF 11
Approved	July 2019	SCQF Points	15
Amended	March 2024	ECTS Points	7.5

Aims of Module

To enable students to develop the quantitative skills required to effectively analyse financial problems.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Evaluate key descriptive statistics within the context of finance.
- 2 Solve specific financial problems with statistical inference and hypothesis testing techniques.
- 3 Construct econometrics models in Excel and specialized statistical computer software SPSS to solve financial problems.
- 4 Criticise regression results generated from Excel and SPSS.

Indicative Module Content

Basic financial mathematics; data presentation and descriptive statistics; probability distributions and asset returns; statistical inference techniques; principal components and factor analysis; Environment, social and corporate governance (ESG) rating methodologies, basic time series analysis; high low method; regression analysis; model transformation; use of SPSS and Excel software.

Module Delivery

Topics are introduced in lectures and developed in computer laboratories and in tutorials for which students are expected to undertake directed independent learning.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Examination Weighting: 100% Outcomes Assessed: 1, 2, 3, 4
 Description: Closed book examination.

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1 comprises 100% of the module grade. To pass the module, a D grade is required.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module None.
 Corequisites for module None.
 Precluded Modules None.

INDICATIVE BIBLIOGRAPHY

- 1 BROOKS, C., 2019. *Introductory Econometrics For Finance*. 4th ed. Cambridge University Press.
- 2 OAKSHOTT, L., 2020. *Essential quantitative methods for business management and finance*. 7th ed. Basingstoke: Palgrave Macmillan.
- 3 BOWERMAN, B., DROUGAS, A, M., DUCKWORTH, W, M., et al., 2019. *Business Statistics and Analytics in Practice*. 9th ed. McGraw Hill.
- 4 PALLANT, J., 2020. *SPSS survival manual : a step by step guide to data analysis using IBM SPSS*. 7th ed. Routledge.