

MODULE DESCRIPTOR

Module Title

Quantitative Business Techniques

Reference	BS2114	Version	9
Created	December 2023	SCQF Level	SCQF 8
Approved	July 2019	SCQF Points	15
Amended	March 2024	ECTS Points	7.5

Aims of Module

To provide students with an understanding of, and the ability to apply, a range of statistical and management science techniques.

Learning Outcomes for Module

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

- 1 Undertake sampling methods and basic statistical techniques in business contexts.
- 2 Understand basic financial mathematics.
- 3 Distinguish techniques of risk management in decision-making progress.
- 4 Adapt data modelling and forecasting techniques in business contexts.

Indicative Module Content

Classification of variables, sampling; financial mathematics symbols, index number; data presentation and measurement; probability distribution; confidence intervals and hypothesis testing; Environmental, social, and corporate governance (ESG) ratings; maximax, maximin, and minimax; decision tree; bayesian analysis; time series; high-low method; simple and multiple linear regression; use of calculator and statistical software Minitab.

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	30	N/A
Non-Contact Hours	120	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 ANDERSON, D., SWEENEY, D., WILLIAMS, T., FREEMAN, J. and SHOESMITH, E., 2024. *Statistics for business and economics*. 6th ed. Andover: Cengage Learning.
- 2 OAKSHOTT, L., 2020. *Essential Quantitative Methods for Business Management and Finance*. 7th ed. Basingstoke: Palgrave.
- 3 BOWERMAN, B., DROUGAS, A. M., DUCKWORTH, W. M., et al., 2019. *Business Statistics and Analytics in Practice*. 9th ed. McGraw Hill.
- 4 LESIK, S., 2018. *Applied Statistical Inference with MINITAB?*. 2nd ed. New York: Chapman and Hall/CRC.