

**This Version is No Longer Current**  
 The latest version of this module is available [here](#)

## MODULE DESCRIPTOR

### Module Title

Quantitative Business Techniques

Reference	BS2114	Version	8
Created	August 2021	SCQF Level	SCQF 8
Approved	July 2019	SCQF Points	15
Amended	September 2021	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 Apply sampling methods and basic statistical techniques in business contexts.
- 2 Apply data modelling and forecasting techniques in business contexts.
- 3 Interpret results generated from specialized statistical computer software.
- 4 Understand basic financial mathematics.
- 5 Apply the techniques of risk management to decision-making problems.

### Indicative Module Content

Classification of variables, sampling; financial mathematics symbols, index number; data presentation and measurement; probability distribution; confidence intervals and hypothesis testing; time series; high-low method; maximax, maximin, and minimax; decision tree; bayesian analysis; simple and multiple linear regression; use of 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, 5  
 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:
<b>A</b>	A
<b>B</b>	B
<b>C</b>	C
<b>D</b>	D
<b>E</b>	E
<b>F</b>	F
<b>NS</b>	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.