

Module Details	
Module Title	Quantitative Methods for Economists
Module Code	AFE4013-B
Academic Year	2023/4
Credits	20
School	School of Management
FHEQ Level	FHEQ Level 4

Contact Hours	
Type	Hours
Lectures	24
Tutorials	12
Directed Study	164

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims
To enhance your understanding of economic analysis by expanding your knowledge of the relevant mathematical and statistical methods with a range of applications across economics. We shall introduce the central quantitative methods used in economics, their problems and their solutions.

Outline Syllabus
Functions. Simultaneous equation solving. Linear algebra in matrix forms. Differential calculus. Constrained and unconstrained optimisation. Integration. Linear programming. Probability distribution: discrete and continuous random variables. Sampling theory and confidence intervals. Hypothesis testing.

## Learning Outcomes

Outcome Number	Description
01	Recognise, apply and discuss the fundamental tools of mathematics and mathematical statistics required for the understanding of economic and econometric analysis.

Outcome Number	Description
02	Apply foundation level quantitative methods to a range of economic problems.
03	3.1 Logical analysis and problem-solving. 3.2 Identify and explain appropriate approaches to solve economic and mathematical problems.

### Learning, Teaching and Assessment Strategy

The teaching and learning on the module will be delivered using a blended approach. The module will involve weekly online lectures and biweekly seminars. Concepts and theories will be explored in weekly online lectures before being discussed and practiced in online and face-to-face tutorials. Campus communication will be used to monitor progress and support learning. The lectures and seminars will be supplemented with resources on Canvas.

### Mode of Assessment

Type	Method	Description	Weighting
Summative	Examination - Closed Book	Examination Closed Book (1.5 Hours)	50%
Summative	Examination - Closed Book	Examination Closed Book (1.5 Hours)	50%

### Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*