

Full Title:	Business Mathematics
Module Code:	MATH B7009
Credits:	5
Valid From:	Semester 1 - 2013/14 (September 2013)
Module Delivered in	3 programme(s)
Module Description:	The course aims to provide the student with an understanding of the basic numerical concepts and techniques relevant to the analysis of data in a business environment.
Learning Outcomes:	
<i>On successful completion of this module the learner should be able to</i>	
<ol style="list-style-type: none"> 1. Understand the concepts of a census and a sample and recognise different types of data. 2. Present and summarise statistical data using suitable tables and statistical graphs. 3. Analyse and draw conclusions from statistical data using measures of Central Tendency and Dispersion. 4. Use statistical techniques (Regression, Correlation and Time Series) to explore patterns within financial figures and use them to get realistic projections for business data. 5. Calculate the various types of Price and Quantity Indices and interpret the effects of inflation on data over time. 	

Module Content & Assessment

Indicative Content

Statistics

Generating tables, constructing graphs. Calculating and interpreting measures of Central Tendency (Mean, Mode, Median) and Dispersion (Standard Deviation and Inter-Quartile Range)

Regression & Correlation

Generating Linear Regression models graphically and algebraically and using them to obtain realistic business estimates. Using Correlation to decide on the strength of a connection between two sets of statistical data.

Time Series Modelling

Identifying patterns in time related data. Finding Trends and Seasonal Variations within the data and using them to generate suitable prediction models. Using the models to project future business figures.

Index Numbers

Understanding how to calculate and interpret simple index relatives. How to generate both fixed base and chain base index numbers over a period of time. Being able to rebase a fixed base index. Understand how to deflate business figures. Being able to generate weighted and aggregate indices.

Assessment Breakdown

%

Course Work

100.00%

Full Time

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Marks Out Of	Pass Marks	Assessment Date	Duration
Class Test	1 hour written class examination	1,2,3	40.00	0	0	Week 5	0
Class Test	1 hour written class examination	4	20.00	0	0	Week 8	0
Class Test	1 hour written class examination	4	20.00	0	0	Week 11	0
Class Test	1 hour class examination	5	20.00	0	0	Week 14	0

No Project

No Practical

No End of Module Formal Examination

Reassessment Requirement

No repeat examination

Reassessment of this module will be offered solely on the basis of coursework and a repeat examination will not be offered.

DKIT reserves the right to alter the nature and timings of assessment

Module Workload & Resources

Workload: Full Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	3.00	Every Week	3.00
Directed Reading	No Description	3.00	Every Week	3.00
Independent Study	No Description	3.00	Every Week	3.00
Total Weekly Learner Workload				9.00
Total Weekly Contact Hours				3.00

Workload: Part Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	2.00	Every Week	2.00
Directed Reading	No Description	4.00	Every Week	4.00
Independent Study	No Description	3.00	Every Week	3.00
Total Weekly Learner Workload				9.00
Total Weekly Contact Hours				2.00

Resources

Recommended Book Resources

Andre Francis 2005, *Business Mathematics and Statistics*, sixth Ed., 1,2,3,4,5, Thomson Learnin UK

Supplementary Book Resources

Lind, Marchal and Wathen 2003, *Basic Statistics for Business & Economics*, Fourth Ed., 1,2,3,12, McGraw-Hill USA

Booth and Turner 1996, *Business Mathematics with Statistics*, First Ed., 11,12,13,14,15, Pitman UK

Louise Swift 2001, *Quantitative Methods*, First Ed., DD1,DD2,S3,S4, Palgrave USA

This module does not have any article/paper resources

This module does not have any other resources

Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_BBSMA_D	Bachelor of Business in Business and Management	1	Mandatory
DK_BBSMA_C(?)	Higher Certificate in Business in Business and Management	1	Mandatory
DK_KCOMB_6	Higher Certificate in Science in Computing and Business	2	Mandatory