

MODULE:	BUSINESS MATHEMATICS & STATISTICS
Semester:	I (Fall)
Stage:	I
Number of Credits:	4 semester credits / 6 quarter units
Theme:	Finance
Assessment Weighting:	40% Coursework 60% Examination

INTRODUCTION

This module provides the students with the essential analytical skills to support an accurate and rigorous approach to decision making. The module is specifically designed to develop the students modelling abilities and problem solving skills required in the modern business world.

AIMS

To ensure students understand the applicability of mathematics and statistics as a basis for decision making in a range of business disciplines (e.g. finance, marketing etc)

To provide students with the core mathematical skills necessary to support their accurate manipulation and interpretation of numerical data

To develop students mathematical skills relevant to the business sector

To develop students confidence in the application of mathematics to support them in their analysis of business information

LEARNING OUTCOMES

Appreciate the importance of mathematics and statistics for the business person

Demonstrate relationships graphically and interpret completed graphs

Design a simple questionnaire and select and collect data as part of a survey

Analyse the results of a survey and present the results in an easily understood manner

Understand the purpose of probability distributions and know when and how to use the various probability distributions

Recognise the aims of statistical inference and be confident to apply statistical tests to data

Apply probability techniques to decision making

Calculate and interpret correlation coefficients

Calculate and interpret the equation of a regression line manually and through suitable software programmes

Use various methods of forecasting-regression analysis and time series analysis

Compare and choose between different capital investment projects using discounting techniques

Solve a variety of business related problems using the process of differentiation

ASSESSMENT METHODS

Course work will account for 40% of the marks, course work will be typically presented in the following formats, e.g., multiple choice exams, case studies, primary research projects. On module completion an examination will account for the remaining 60% of the marks.