

## MODULE DESCRIPTOR

<b>MODULE TITLE</b>	Business Statistics		
<b>MODULE CODE</b>	MG3002 (L6)	<b>CREDIT VALUE</b>	<b>20 Credits / 10 ECTS</b>
<b>SCHOOL</b>	SCHOOL OF BUSINESS AND MANAGEMENT		

### MODULE AIMS

MG3002 concentrates on aspects of uncertainty within a business context. Different statistical models aim to solve different forms of uncertainty. This module seeks to teach students how to match up business data types with an appropriate model; how to analyse the data; and how to discuss the outcomes in an appropriate manner. The model aims to balance technique with reporting skills. Realistic business problems across a range of business functions, e.g. Marketing, Planning, etc., are introduced and analysed through appropriate software.

### MODULE CONTENT

The module develops a broad range of standard business statistics models. These models are introduced at a conceptual level but they are given practical relevance through the use of appropriate business based data sets in conjunction with statistical software. Causal modelling can relate, for example, advertising and price to sales, or to compare before and after behaviour of consumers to a specific event, Forecasting is an essential business tool for helping the planning process in business in all business areas.

The first set of ideas concentrates on causal modelling:

- 1) Comparing 2 populations
- 2) Comparing > 2 populations
- 3) Multiple Regression Modelling

A range of forecasting models is then explored:

- 1) Decomposition model
- 2) Regression modelling
- 3) Holt Winters modelling
- 4) Non-Linear models

Finally aspects of non-parametric problems and statistical quality control are studied.

### INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:

1. Discuss in-depth the role and the use of statistics in the business environment.
2. Outline the underlying structure of a range of statistical models and apply them.
3. Competently use application IT packages to aid the analysis of statistical problems.

### TEACHING METHODS

---

Essential models, which can be categorised into fairly discrete groups, are introduced in the lectures. Students are then expected to use their own time to deepen their understanding of these models. The conceptual models are made to come alive during the lectures through the use of IT facilities. Students are then expected to use their own time to develop and sharpen their data handling expertise. Students are given the opportunity to test their knowledge, both conceptual and practical, on a weekly basis through interactive seminar sessions. The development of each student's skill set is measured through their assessed work.

---

## **ASSESSMENT METHODS**

This module is assessed through an essay (50%) and an examination (50%).