

## MODULE DESCRIPTOR

### Module Title

Statistics And Modelling For Business Analytics

Reference	CB1013	Version	2
Created	February 2024	SCQF Level	SCQF 7
Approved	January 2024	SCQF Points	15
Amended	April 2024	ECTS Points	7.5

### Aims of Module

The purpose of this course is to provide the students with a sound conceptual and practical introduction to statistics and its application in business analytics

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Recognise business situations that require the use of statistical tools of analysis.
- 2 Select and execute the appropriate statistical tool for a specific business situation.
- 3 Develop judgment and decision-making ability through the use of quantitative tools and/or statistical software
- 4 Effectively and ethically interpret and present statistical information

### Indicative Module Content

Topics covered include, but are not limited to, the following: Describing Populations and Distributions; Numerical and Graphical Summaries; Describing Bivariate Data; Probability Distributions; Sampling Design and Sample Properties; Estimation; Hypothesis Testing; Analysis of Variance; Regression Analysis; Multiple Regression Analysis. The module engages students with UNESCO's Education for Sustainable Development Normative, Strategic and Critical thinking competencies in terms of recognising, understanding, and questioning the norms involved with calculating and presenting statistics and developing appropriate strategies for using statistics and data models for a sustainable future.

### Module Delivery

Content will be delivered through a combination of lectures, workshops, video presentations, lab work, and guest presentations.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	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: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3, 4

Description: The module will be assessed by a portfolio of activities detailing the conceptual and practical understanding of the application of statistics in a business context.

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

The calculation of the overall grade for this module is based on 100% weighting of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	The student needs to achieve an A in C1.
<b>B</b>	The student needs to achieve a B in C1.
<b>C</b>	The student needs to achieve a C in C1.
<b>D</b>	The student needs to achieve a D in C1.
<b>E</b>	The student needs to achieve an E in C1.
<b>F</b>	The student needs to achieve an F in C1.
<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 DEIZ, D.M., BARR, C.D. and CETINKAYA-RUNDEL, M., 2012. OpenIntro statistics. Boston, MA, USA:: OpenIntro.
- 2 JAGGIA, S. et al., 2021. Business analytics: Communicating with numbers. McGraw-Hill Education.
- 3 SHARPE, N.R., DE VEAUX, R.D. and VELLEMAN, P.F., 2020. Business statistics. Pearson Higher Ed.