MODULE DESCRIPTOR

Module Title

Data Analytics For Business Decisions

Reference	CBM204	Version	3
Created	January 2024	SCQF Level	SCQF 11
Approved	July 2018	SCQF Points	15
Amended	April 2024	ECTS Points	7.5

Aims of Module

This module introduces students to the principles of Data Science and Business Analytics. Drawing on case studies and practical examples students will learn to evaluate different analytic techniques and prototype solutions to inform decision-making in a range of business processes and applications. The focus of this module is to provide a broad overview of key concepts, which will be explored further in subsequent modules.

Learning Outcomes for Module

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

1	Demonstrate a detailed understanding of CRISP-DM and all stages of the Data Mining Life Cycle
2	Critically evaluate different data analysis approaches in response to a business problem
3	Analyse a range of data types
4	Communicate analytic processes and outputs effectively to a broad range of stakeholders.

Indicative Module Content

Understanding the data analytics and data mining lifecycle (CRISP-DM); the roles and responsibilities in business analytics; data driven strategy and data preparation. A broad overview of key concepts and principles including: descriptive analytics; predictive analytics; data modelling; network analysis; community detection; natural language processing, machine learning, supervised vs unsupervised learning; classification models. Communicating technical content to a nontechnical audience.

Module Delivery

The module is delivered via online exercises, workshops, industry speakers, case studies and lab tutorials.

Indicative Student Workload	Full Time	Part Time
Contact Hours	36	36
Non-Contact Hours	114	114
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
Actual Placement hours for professional, statutory or regulatory body		

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 report detailing the process and findings of a business analytics project.

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:
A	The student needs to achieve an A in C1.
B	The student needs to achieve a B in C1.
C	The student needs to achieve a C in C1.
D	The student needs to achieve a D in C1.
E	The student needs to achieve an E in C1.
F	The student needs to achieve an F in C1.
NS	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	FOREMAN, J. (2013). *Data Smart: Using Data Science to Transform Information Into Insight.* Indianapolis: Wiley
2	MAYER-SCHONBERGER, V. and CUKIER, K. (2013). *Big data. A Revolution that will transform how we live, work and think.* London: John Murray
3	PROVOST, F. and FAWCETT, T. (2013). *Data science for business.* Sebastopol, CA: O'Reilly Media
4	STEPHENS-DAVIDOWITZ, S. and PINKER, S. (2017). *Everybody lies.* New York: Harper Collins