

## MODULE DESCRIPTOR

### Module Title

Business Intelligence

Reference	CM3709	Version	2
Created	January 2023	SCQF Level	SCQF 9
Approved	June 2019	SCQF Points	30
Amended	June 2023	ECTS Points	15

### Aims of Module

To provide students with an in-depth knowledge of business intelligence and data warehousing concepts, methods and tools for solving business problems.

### Learning Outcomes for Module

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

- 1 Critically evaluate state-of-the-art business intelligence tools to support decision-making.
- 2 Compare and contrast different methods of visualising data appropriate to various stakeholders.
- 3 Compare and contrast different methods for data integration and master data management.
- 4 Design, implement and evaluate a data warehousing solution for a business problem, including the application of techniques for the extraction, transformation and loading of data from various sources.

### Indicative Module Content

Business Intelligence (BI) systems and types of decisions managers face. Data Visualisation and Dashboard Techniques. Mapping data to visual representations; awareness of accessibility issues. Data integration, data federation and data virtualisation. Data lakes. ETL (Extraction, Transformation and Loading). Master Data Management. Multi-Dimensional Data Analysis. Concepts and benefits associated with data warehousing. Architecture of a data warehouse. Tools for Data warehousing.

### Module Delivery

The module is delivered in Blended Learning mode using structured online learning materials/activities and directed study, facilitated by regular online tutor support. Workplace Mentor support and work-based learning activities will allow students to contextualise this learning to their own workplace. Face-to-face engagement occurs through annual induction sessions, employer work-site visits, and modular on-campus workshops.

<b>Indicative Student Workload</b>	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	30	N/A
Placement/Work-Based Learning Experience [Notional] Hours	240	N/A
TOTAL	300	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>	240	

## 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:	This coursework will consist of a practical development and a written evaluation of a business intelligence solution.				

## 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 must achieve an A in C1.
<b>B</b>	The student must achieve a B in C1.
<b>C</b>	The student must achieve a C in C1.
<b>D</b>	The student must achieve a D in C1.
<b>E</b>	The student must achieve an E in C1.
<b>F</b>	The student must 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, in addition to course entry requirements.
Corequisites for module	None.
Precluded Modules	None.

## INDICATIVE BIBLIOGRAPHY

- 1 SHERMAN R., 2014. Business Intelligence Guidebook: From Data Integration to Analytics. Morgan Kaufmann.
- 2 SHARDA R., DELEN D. and TURBAN E., 2014. Business Intelligence: A Managerial Perspective on Analytics. 3rd ed. Pearson.
- 3 KIRK, A., 2016. Data Visualisation, A Handbook for Data Driven Design. Sage Publishing.
- 4 VAISMAN, A., 2014. Data warehouse systems: design and implementation. Springer.
- 5 DAMA International., 2017. DAMA-DMBOK: Data Management Body of Knowledge. 2nd Ed. Technics Publications.