

## MODULE DESCRIPTOR

### Module Title

Business Intelligence

Reference	CM2138	Version	1
Created	December 2023	SCQF Level	SCQF 8
Approved	June 2019	SCQF Points	15
Amended	June 2023	ECTS Points	7.5

### 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 Report the main components of a business intelligence system.
- 2 Use a methodology for designing a business intelligence solution
- 3 Use appropriate tools to create a business intelligence solution.
- 4 Compare different methods for data integration and master data management.
- 5 Practice different methods of visualising data appropriate to different stakeholders.

### 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. Security, privacy and legal issues. 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

Key concepts are introduced and illustrated through lectures and directed reading. In the laboratories the students will progress through a sequence of exercises to further their understanding and gain practical experience of business intelligence and data warehousing techniques and tools.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	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, 5  
 Description: This coursework will consist of developing a business intelligence and data warehouse solution.

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

The calculation of the overall grade for this module is based on 100% weighting of Component 1. 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.