Module Specification

Module Summary Information

1	Module Title	Data Warehousing
2	Module Credits	20 Credits
3	Module Level	Level 6
4	Module Code	CMP6209

5	Module Overview

This module covers the acquisition, organization, storage and processing of large volumes of data including relevant security and legislative issues. Since data is a vital part of business intelligence, this module provides input to the other modules on the programme and builds directly upon the level 5 database module. The module also explores techniques for querying the data warehouse.
Learning and Teaching.

This module will introduce data warehousing techniques through practice based activities associated with real world issues. You will gain knowledge pertaining to the application of data warehousing techniques through practical experience, theory in practice and by exploring 'real world' issues via a range of software tools. In addition, you will learn about relevant security and legal issues associated with storing large amounts of data, particularly when it relates to personal information.
The module is designed as a series of pre-reading and discussions, interactive-taught lectures with breakout sessions and workshop/lab exercises using a variety of tools and techniques. You are expected to investigate the topics before sessions. This approach will enable you to gain an insight into how specific data warehousing techniques are being used in organisations before you learn supporting theory and practical application through the use of software. You are expected to come to sessions prepared and having completed all the exercises and activities set.
This module is very practical and you will be expected to complete all set practical exercises in the order which they are presented. This approach will enable you to build your knowledge, skills and practice the embedded transferable employability skills.

6	Indicative Content

- Review of database theories with regard to Data Warehousing

- Introduction to Data Warehousing concepts

- Dimension modelling

- ETL Process – Extract

- ETL Process – Transform

- ETL Process – Load

- OLAP

- SQL

- Business Intelligence

- Data Warehousing Security

- Legislation on data security and information privacy.

- Guest Lecture

7	Module Learning Outcomes
	On successful completion of the module, students will be able to:
1	Model and effectively communicate the requirements for a data warehouse for given enterprise
2	Implement data warehouse schemas using appropriate software
3	Using appropriate tools, process and effectively communicate the data in a data warehouse to meet organisational information needs
4	Understand and professionally report on the security and legislative issues surrounding the storing of information

8	Module Assessment			
Learning Outcome				
	Coursework	**Exam**	**In-Person**	
1-4	X			

9	Breakdown Learning and Teaching Activities	
Learning Activities		**Hours**
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable		48
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE		80
Private Study (PS) includes preparation for exams		72
Total Study Hours:		200