MODULE DESCRIPTOR

Module Title

Data Warehousing

Reference	CMM531	Version	3
Created	April 2017	SCQF Level	SCQF 11
Approved	April 2015	SCQF Points	15
Amended	August 2017	ECTS Points	7.5

Aims of Module

To introduce the main concepts and key components of data warehousing techniques and applications.

Learning Outcomes for Module

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

1	Identify and explain the main concepts and key components of a data warehouse.
2	Describe, analyse and apply a methodology for designing a data warehouse.
3	Explain and analyse the key techniques of data warehousing applications and OLAP.
4	Design, implement and evaluate a data warehousing application.

Indicative Module Content

Data Capture, data cleaning, data conformation, data integration, data federation and data virtualisation. Concepts and benefits associated with data warehousing. Conventional, spatial and temporal data warehouses. Architecture of a data warehouse. Data warehouse design. Tools for Data warehousing. State of the art in data warehousing, including data warehousing in the cloud. Data warehousing with big data. Case studies.

Module Delivery

Key concepts are introduced and illustrated through lectures and directed reading. The understanding of students is tested and further enhanced through interactive tutorials. In the laboratories the students will progress through a sequence of exercises to further their understanding and gain practical experience of data warehousing.

Indicative Student Workload	Full Time	Part Time
Contact Hours	48	48
Non-Contact Hours	102	102
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
Actual Placement hours for professional, statutory or regulatory body		