

Module code	DAM	NQF level	7
Credit value	20	Study duration	12 weeks

Data Analytics for Managers

Module description

The ability to understand the significance of data is a key executive function. As data analytics becomes increasingly important in the global economy, managers not only need to know how to gain valuable insight from data but also need to understand data sources, how to collect and interpret data and use the findings to inform key business decisions. This module will examine the study of data analytics for managers, exploring the technical aspects of collecting and organising data, and carrying out data analytics. In business applications, data science aims to promote tangible business benefits and brings together computing knowledge and skills, data analysis and statistical methodology, and most importantly, business domain knowledge. Managers need to know what data analytics can do for a business in order to prepare for future implications. They need to understand the role of data analytics and the communication issues that can arise due to requirements, such as the need for rigour, precision and ethical concern.

This module aims to:

- Equip students with an understanding of how managers can utilise and interpret data analytics and make sense of the valuable insight that can be derived from it in order to enhance business functions and organisational performance

Learning outcomes

On successful completion of the module, student should be able to:

- provide managers with foundation of the main concepts of data analytics in order to communicate more effectively with appropriate personnel
- identify and review potential sources of data
- understand various tools that can be utilised used for analysis as well as the data platforms that can support the analytic process and end-to-end workflow
- examine the importance of ethical issues and regulations in managing data within a business
- understand principles of data governance and risk management for data

Syllabus

- What is data science/analytics, machine learning and artificial intelligence
- The role of the manager as a data scientist
- Main concepts of data analytics
- Principles of data governance
- Potential sources and uses of data in business
- Examine the various tools and data platforms that can be utilised for analysis
- Business and data ethical issues and regulations
- Risk management for data

Learning and teaching methods

Blend of lecturecasts, online tests, discussion forums, case studies, reading, independent study.

Description of unit of assessment	Length/Duration	Submission date	Weighting
Interactive poster presentation	Equivalent to 2,500 words	Week 5-6	50%
Written report	2,500 words	Week 12	50%