Anglia Ruskin University

Module Definition Form (MDF)

Module code: MOD005445	**Version:** 1 **Date Amended:** 04/May/2016

1. Module Title
Big Data and Content Management

2a. Module Leader
Chris Jakeman

2b. Department
Department of Computing and Technology

2c. Faculty
Faculty of Science and Technology

3a. Level
6

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions

Type	**Module Code**	**Module Name**	**Condition**
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

In a knowledge economy, data is probably the most valuable of the non-human enterprise assets. Proper governance of data assets can be a critical success factor since data and information will often outlast the applications it was derived from requiring the management of data and knowledge assets through time as applications, and even business processes change.

This module endeavours to provide students with an understanding what big data is, how it is managed and the technologies involved.

Assessment:

The key element is the design and building of a data warehouse. The student will populate the warehouse and investigate, evaluate and demonstrate techniques to analyse the data in a variety of ways.

Module theory is assessed by a report showing how Big Data is managed and used.

6b. Outline Content

What is Big Data (volume, variety, and velocity)

Business information and Data Warehousing technologies

Data Mining

Database technologies including modern innovations.

The importance of Meta Data

Data Facts and Dimensions (OLAP)

Data Management

6c. Key Texts/Literature

The reading list to support this module is available at: http://readinglists.anglia.ac.uk/modules/mod005445

6d. Specialist Learning Resources

Students are expected to have comprehensive access to an internet-capable computer in order to conduct research both on the internet and access the additional teaching resources will be provided on the V.L.E.

A computer capable of of hosting a modern database system such as MySQL, MongoDB or Postgres.

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Define Big Data and evaluate its uses.
2	Knowledge and Understanding	Demonstrate an understanding of big data database technologies.
3	Intellectual, practical, affective and transferrable skills	Construct a data warehouse.
4	Intellectual, practical, affective and transferrable skills	Evaluate the effectiveness of data management techniques in a given scenario.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2017/8	F01UCP	Semester 2	University Centre, Peterborough	Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	12	1,2	Lecture 1 hr x 12 weeks
Other teacher managed learning	24	2,4	Labs / practical's/ seminars 2 hr x 12 weeks
Student managed learning	114	1,2,3,4	reading, research, skills practice, assignment
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Practical	2,3,4	70 (%)	Fine Grade	30 (%)
Demonstation of a data warehouse designed and constructed by the student (2,000 words equivalent)					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
011	Coursework	1,2	30 (%)	Fine Grade	30 (%)
Report describing how big data can be used and managed in a given scenario. 1,000 words					

In order to pass this module, students are required to achieve an overall mark of 40%.
In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment of as specified above
(b) pass any pass/fail elements