Module Details	
Module Title	Large Scale Data Driven Applications
Module Code	COS6009-B
Academic Year	2024/5
Credits	20
School	School of Computer Science, AI and Electronics
FHEQ Level	FHEQ Level 6

Contact Hours	
Type	Hours
Lectures	12
Tutorials	12
Laboratories	12
Directed Study	164

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1

Module Aims

To develop an understanding of the theory and practice of large-scale data driven applications.

Outline Syllabus

Study of developments in data models subsequent to the relational model. Study of developments in features supported by DBMSs. Study of database design for systems with advanced features. Study and apply legal, social, ethical and professional issues related to big data. Service-oriented architectures, orchestration of services, and support technologies.

Learning Outcomes

Outcome Number	Description
O1	Demonstrate a knowledge and understanding of the theory and practice of large-scale data driven applications.
O2	Apply skills in the design, and implementation of large-scale data driven applications.
O3	Demonstrate competence is applying theoretical skills to practical problems.

Learning, Teaching and Assessment Strategy

A combination of lectures/tutorials/lab sessions/directed study. Concepts, principles and theories explored in formal lectures, practised and demonstrated in laboratory classes and practised and discussed in tutorials. Practical skills developed in laboratory sessions. Oral feedback is given during labs & tutorials.

Coursework will assess the application of practical skills to the knowledge base of the module, the examination will assess the wider learning outcomes expressed in the descriptor. Supplementary coursework will take the same format as the original assessment.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Coursework - Written	Design and critical analysis of a web-based application for providing a range of functions on a large dataset.	50%
Summative	Coursework - Written	Implementation of the design created in component 001.	50%
Formative		Monitor students learning and provide ongoing feedback on their courseworks, and help students identify their strengths and weaknesses and target the areas that need work in both courseworks	N/A

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.