

# AMITY GLOBAL INSTITUTE

## MODULE SYLLABUS

Course	Master of Science Data Science Awarded by Teesside University
Module Title	Big Data and Business Intelligence
Module Syllabus No. (if any)	CIS4008-N
Content	This module aims to develop the student's ability to design and implement database, big data and analytics applications to meet business needs. A case study will be used to follow the system development life cycle. The student will develop a plausible application from inception to implementation for a real-world scenario. The module will investigate the issues and technologies associated with implementing and supporting large scale databases and the services that are needed to maintain and access a repository of data. Investigations will be undertaken in a number of areas including big data, data warehouses, integrating legacy data, data management and approaches that support the modelling and visualisation of data for a range of use views.
No. of Teaching Hours	12 X3 hours
Teaching Methods	Lectures are supported by laboratory-based practicals. Lectures include interactive demonstrations.
Assessment Methods and Weightages	100% coursework
Skills for Maximising Learning Outcomes	Reading and Research
Dates of Examinations, Major Assessments and Assignments	See University Academic Calendar
Recommended Text	The Big Data Agenda 9781911534730, 9781911534976 Richterich, Annika 2018-04-13
Additional Reference Texts (if any)	
Additional Remarks (if any)	

No.	Learning Outcomes/Aims
1	Reflect on and critically appraise own performance and skills development during the module.
2	Examine and evaluate system level software architectures, tools and techniques for big data systems.
3	Demonstrate a critical understanding of the issues associated with business intelligence and big data.
4	Integrate and synthesise diverse concepts and theory on system level software architectures for big data systems to design the data processing requirements of big data system.
5	Research an emerging database technology and communicate the findings in writing in an academic context.
6	Select and implement appropriate BI tools and evaluate the results of their application to a given scenario. Autonomously plan, design and implement a big data system to meet an enterprise's information requirements and business rules for big data.
7	Explore how Big Data creates several new types of analytical workload. Examine Big Data technology platforms beyond the data warehouse.
8	Investigate how to analyse un-modelled, multi-structured data using appropriate data warehouse and business intelligence tools and techniques. Explore how to integrate Big Data with traditional data warehouses and BI systems. Explore

Note: All Information provided to Amity will be kept strictly confidential except for those required under statutory requirements and by government authorities and relevant university partners and accreditation bodies as part of the regulatory or course requirements.

# AMITY GLOBAL INSTITUTE

	how to clearly understand business use cases for different Big Data technologies and how Big Data can deliver business value.
--	---

Note: All Information provided to Amity will be kept strictly confidential except for those required under statutory requirements and by government authorities and relevant university partners and accreditation bodies as part of the regulatory or course requirements.