

Data Modelling

Module Information

2022.01, Approved

Summary Information

Module Code	4504CSQR
Formal Module Title	Data Modelling
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Oryx Universal College WLL

Learning Methods

Learning Method Type	Hours
Lecture	17
Practical	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims	To introduce the fundamentals of data manipulation and presentation. To model and manipulate data using spreadsheet and database based applications. To evaluate the advantages and disadvantages of spreadsheet and database based development models.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Construct spreadsheet based applications from a given set of requirements.
MLO2	2	Create logical and physical entity relationship models from a given set of requirements.
MLO3	3	Construct database based applications from logical and physical entity relationship models.

Module Content

Outline Syllabus	Data Domains, Models & Abstraction Spreadsheet Modelling Design, Manipulation & Reporting Limitations Logical Data Modelling Entities Relationships, Cardinality & Optionality Physical Data Modelling Tables Attributes Relationships Functional Dependency & Normalisation 1NF - 2NF - 3NF Database Modelling Designers & Query-By-Example
Module Overview	
Additional Information	This module delivers to students the ability to model and manipulate data in various differing scenarios. Student will be required to construct and manipulate data in spreadsheet based applications, then to model data using various data modelling techniques leading towards the construction and manipulation of database based applications.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Data Modelling Scenario	100	0	MLO1, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Yun Sheng	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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