

Liverpool John Moores University

Title: Information Systems Development
Status: Definitive
Code: **3109FNDCMP** (126621)
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
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Academic Level: FHEQ3 **Credit Value:** 20 **Total Delivered Hours:** 44
Total Learning Hours: 200 **Private Study:** 156

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Practical	11
Tutorial	11

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Group report and presentation utilising appropriate tools/techniques to plan and design an information-oriented solution.	40	
Artefacts	AS2	Development and demonstration of an information system from a functional design using a database application.	60	

Aims

*To analyse a given industry oriented case-study.
 To develop a computer based plan /design for a solution to a problem scenario.
 To introduce students to the importance of structured analysis and design in order to produce effective and efficient diagrams which aid in the production and implementation of computer-based information systems.*

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify and describe the importance of information, information systems and their viability in business organisations
- 2 Identify and explain fact finding techniques which are used for analysing the requirements for developing information systems
- 3 Demonstrate how information is transformed into meaningful diagrams for database implementation
- 4 Design and develop a database using the diagrams suitable for database implementation
- 5 Demonstrate and explain how the database can be used to manipulate data to extract meaningful information as well as the need for testing

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Group report	1	2	3
System demonstration	3	4	5

Outline Syllabus

*Identify what information is and consider fact finding techniques
 Define the stages within the feasibility study
 Identify and develop functional and data modelling techniques in order to produce DFDs and ERDs
 Design and develop a database using the diagrams created from a relevant case study ensuring that correct data types, relevant formats and validation masks have been included and their importance to minimize data entry errors
 Consider the importance of screen design and navigation paths
 Identify the need for security and maintenance when using databases
 Evaluate the possible changeover methods available to organisations*

Learning Activities

Student-focused learning activities based on a combination of formal lectures and practical, experiential learning in laboratories, with supporting tutorials and seminars designed to reinforce and increase the student learning experience.

Theory oriented lectures followed by tutorials and where applicable lab-based practicals will be used in the module delivery.

Notes

This module enables the student to identify the importance of information and how information can be transformed into developing logical designs in order to develop a working database which will manipulate data to produce meaningful information for the end user.