

## Liverpool John Moores University

Title: Fundamentals of Information Systems  
Status: Definitive  
Code: **4210COMP** (127970)  
Version Start Date: 01-08-2021

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

Team	Leader
Mark Allen	Y
Mark Taylor	

**Academic Level:** FHEQ4      **Credit Value:** 20      **Total Delivered Hours:** 44  
**Total Learning Hours:** 200      **Private Study:** 156

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Practical	22

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Information Systems Report	50	
Report	AS2	Design Model	50	

### Aims

*To introduce the concepts of information systems*  
*To examine the various hardware and software components of information systems*  
*To develop skills in designing and building information systems*  
*To understand the planning and management of information systems*  
*To explore the uses and impact of information systems.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Identify the need and use of information systems.
- 2 Describe the components of an information system.
- 3 Describe the development processes of building an information system.
- 4 Describe the basic concepts of information system management.

## Learning Outcomes of Assessments

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

Information Systems	1	2
Report		
Design Model	3	4

## Outline Syllabus

### *Fundamentals*

- *Need for information in decision making*
- *Basic concepts: data, information, knowledge and metadata*
- *Categories of information based on source, nature and level*
- *Organising data and information: structured, semi-structured and unstructured information*

### *Information Systems*

- *Components: people, hardware, software, communication and data*
- *Types of information systems: data processing systems, management information systems, decision support systems, executive information systems*
- *Functions of information systems: gathering, storing and processing data and outputting information*

### *Building Information Systems*

- *Information systems development: analysis, design, implementation, testing and maintenance*
- *Databases and data warehouses*
- *Methodologies: structured, data flow, object-oriented*
- *Telecommunications and networks*

### *Uses*

- *Business systems*
- *Planning, strategy and management*
- *Decision making*
- *Impact of information systems*

## Learning Activities

Theory will be covered via lectures and practical knowledge will be acquired via practical laboratory sessions and coursework.

### **Notes**

This module is intended to provide basic knowledge in relation to computer systems development, which students will need as support knowledge for subsequent modules at FHEQ 5 and 6