

Liverpool John Moores University

Title: FUNDAMENTALS OF INFORMATION SYSTEMS
Status: Definitive
Code: **4110COMP** (121208)
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
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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 55

Total Learning Hours: 200 **Private Study:** 145

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Practical	33

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Feasibility Study	50	
Report	AS2	Group Coursework	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 Understand and explain the need and use of information systems
- 2 Explain the components of an information system
- 3 Explain the development processes of building an information system
- 4 Explain the basic concepts of information system management

Learning Outcomes of Assessments

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

Feasibility Study	1	2
Group Coursework	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*

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 Information Systems, which students will need as support knowledge for subsequent modules at FHEQ 5 and 6.