

Liverpool John Moores University

Title: Computer Architecture and Configuration
Status: Definitive
Code: **4035ENG** (116931)
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering
Teaching School/Faculty: Electronics and Electrical Engineering

Team	Leader
Ronan McMahon	Y

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 60
Total Learning Hours: 200 **Private Study:** 140

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	20
Practical	40

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Technology	Practical		30	
Technology	Class test		30	
Technology	Lab		40	

Aims

The module introduces computer knowledge and introduces the basics of networking

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a basic theoretical and practical knowledge of computer hardware, software and operating systems; administration and technical requirements
- 2 Demonstrate a basic theoretical and practical knowledge of device interconnectivity

Learning Outcomes of Assessments

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

Technology	1	2
Technology	1	2
Technology	1	2

Outline Syllabus

Review of Number Systems.

The fundamental components of a microcomputer system

Introduction to typical microprocessor architecture

Memory Sub-systems

Microprocessor I/O

Peripheral Devices

Interfacing and data transfer

Processors and memory

Data handling: storage and communication

Internal and external busses

Hardware configuration

Peripheral selection and connection.

Operating Systems and O/S basics

OSI model basics

Network basics: Topologies, Network Connections, Ethernet

Learning Activities

Lectures and lab work

Notes

The module introduces the basic elements of computers and the devices to which they are connected. It also introduces Busses and Links as the paths to interconnect the two.