

Liverpool John Moores University

Title: INTRODUCTION TO COMPUTER ARCHITECTURE
Status: Definitive
Code: **4502TECYPC** (115845)
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering
Teaching School/Faculty: YPC International College (Kolej Antarabangsa YPC)

Team	Leader
Paul Otterson	Y

Academic Level: FHEQ4
Credit Value: 12
Total Delivered Hours: 26
Total Learning Hours: 120
Private Study: 94

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	12
Tutorial	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	75	2
Test	AS2	Coursework: In-class test	25	

Aims

To provide an introduction to microprocessor based computer systems

Learning Outcomes

After completing the module the student should be able to:

- 1 describe how data and code are represented in a computer system and manipulate the various numbers bases that are used.
- 2 identify the fundamental components of a microprocessor-based system.
- 3 Describe how instructions are executed in a fetch decode execute cycle.
- 4 Describe a typical microprocessor, its architecture and associated instruction set
- 5 Describe microprocessor I/O and data transfer

Learning Outcomes of Assessments

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

EXAM	1	2	3	4	5
In-class test	1	2	4		

Outline Syllabus

Review of Number Systems.
The fundamental components of a microcomputer system
Introduction to a typical microprocessor architecture
Memory Sub-systems
Microprocessor I/O
Peripheral Devices
Interfacing and data transfer

Learning Activities

By a series of lectures and tutorials

Notes

The course provides an appreciation of computer architecture and interfacing