

Liverpool John Moores University

Title: Pre Masters Computing
Status: Definitive
Code: **6500PMEC** (120810)
Version Start Date: 01-08-2016

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

Team	Leader
Michael Shaw	Y

Academic Level: FHEQ6
Credit Value: 15
Total Delivered Hours: 71.5
Total Learning Hours: 150
Private Study: 78.5

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	10
Practical	30
Seminar	20
Tutorial	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Portfolio	40	
Presentation	AS2	Presentation of portfolio	20	
Exam	AS3	Examination	40	1.5

Aims

This module aims to provide students with knowledge of the fundamental concepts within computer science and an understanding of hardware, software and issues around design and usability. Students will learn how to use and select different IT applications and bases for particular situations.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate knowledge and understanding of the core concepts of key technologies and physical infrastructure elements used in computing.
- 2 Examine the core concepts of the nature and development of software.
- 3 Explain how computing interacts with social, organisational and individual user factors.
- 4 Select and apply appropriate IT applications and information handling techniques.
- 5 Demonstrate an understanding of the subject area with reference to leading developments in the field.

Learning Outcomes of Assessments

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

Portfolio	3	4	5
Presentation	3	4	5
Examination	1	2	

Outline Syllabus

Hardware:

Key principles

Main types of computer hardware

Key concepts of computer architecture – representation of data and programs in memory, arithmetic/logic unit, registers, instruction sets

Historical, current and future trends

Software:

Key principles

Main types of software including operating systems, application software

The role of programming

Social, organisational and individual user factors:

Social context of computer use

How computing is used within organisations

The individual user – issues of design and accessibility

The use of browsers, search engines and catalogues

Learning Activities

Lectures, seminars, group work, computing laboratory work. Independent learning

and self-directed study will support these activities.

Notes

This module will provide students with the knowledge and skills to prepare students for progression to a postgraduate level programme in Engineering or Computing.