

Liverpool John Moores University

Title: INTRODUCTION TO COMPUTING
Status: Definitive
Code: **4015ENG** (106161)
Version Start Date: 01-08-2016

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

Team	Leader
Princy Johnson	Y

Academic Level: FHEQ4 **Credit Value:** 12 **Total Delivered Hours:** 48
Total Learning Hours: 120 **Private Study:** 72

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Practical	24
Seminar	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Simple application	40	
Essay	AS2	Programming project	60	

Aims

To introduce the student to the basic principles of programming on a computer or microprocessor. To familiarise the student with most features of the C programming language. To give the student practice in developing simple programming applications.

Learning Outcomes

After completing the module the student should be able to:

- 1 Write simple programmes using C or a similar language.
- 2 Interact with the operating system.
- 3 Produce a software application to solve a technical problem.

Learning Outcomes of Assessments

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

CW	1	2	
CW	1	2	3

Outline Syllabus

Use of Windows based software.

The programming environment.

Programming fundamentals, data types, variables, objects, assigning properties, programme statements.

Conditional statements and constructs.

Looping or decision making statements and constructs.

Arrays, strings and structures.

Functions, file I/O.

Bit manipulation.

Learning Activities

By a series of seminars and practical sessions. Students will be encouraged to work independently.

Notes

This module is designed to provide a formal introduction to a programming language and its application to engineering problems.