

Liverpool John Moores University

Title: Advanced Programming
Status: Definitive
Code: **6114ENG** (116976)
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: FHEQ6 **Credit Value:** 20 **Total Delivered Hours:** 48
Total Learning Hours: 200 **Private Study:** 152

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Practical	24
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	Test		20	
Technology	Tech		40	
Technology	Tech		40	

Aims

To develop the approach and skills necessary to design and implement a software solution using an object oriented approach

Learning Outcomes

After completing the module the student should be able to:

- 1 Implement high level language constructs
- 2 Translate a programming specification to working program
- 3 Carry out a high level design using an object oriented approach

Learning Outcomes of Assessments

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

Test	1
Technology	2
Technology	3

Outline Syllabus

Review of high level language program constructs:

Arrays, string handling, file I/O.

Data structures, Classes, Inheritance, Objects, Object Oriented Programming

Object oriented programming: classes, inheritance.

File handling, operating systems interfacing, data base handling.

Development of multi-form Windows applications.

Learning Activities

By a combination of lectures, tutorials and laboratories

Notes

This module is intended to improve the student's software design, programming and implementation skills.