

Liverpool John Moores University

Title: PROGRAMMING IN C++
Status: Definitive
Code: **6023TECH** (105439)
Version Start Date: 01-08-2011

Owning School/Faculty: Engineering
Teaching School/Faculty: Engineering

Team	Leader
Tony Moore	Y

Academic Level: FHEQ6
Credit Value: 12.00
Total Delivered Hours: 48.00
Total Learning Hours: 120
Private Study: 72

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Practical	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Coursework	50.0	
Essay	AS2	Coursework	50.0	

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 Design and implement a computer program in a high level language
- 2 Translate a programming specification to a set of program constructs
- 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:

CW	1	2
CW	2	3

Outline Syllabus

Advanced high level language constructs:

Arrays, pointers, input-output, data structures.

Object oriented programming: classes, inheritance.

File handling, operating systems interfacing.

Program development: functions, multiple files, development tools

Learning Activities

By a combination of lectures, tutorials and laboratories

References

Course Material	Book
Author	Kernighan,B.W. & Ritchie,D.
Publishing Year	1988
Title	The C Programming Language
Subtitle	
Edition	2nd
Publisher	Prentice-Hall
ISBN	

Course Material	Book
Author	Stroustrup, B.
Publishing Year	1997
Title	The C++ Programming Language
Subtitle	
Edition	3rd ed.
Publisher	Addison-Wesley
ISBN	0-201-889544

Course Material	Book
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Author	H. M. Deitel and P. J. Deitel
Publishing Year	1994
Title	C++ How to Program
Subtitle	
Edition	2nd ed
Publisher	Prentice-Hall
ISBN	

Notes

This module introduces advanced programming techniques and an object oriented approach to design.