

Summary Information

Module Code	4500CSQR
Formal Module Title	Introduction to Programming
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Oryx Universal College WLL

Learning Methods

Learning Method Type	Hours
Lecture	33
Practical	22
Workshop	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-PAR	PAR	September	12 Weeks

Aims and Outcomes

Aims	To gain an understanding of how software is developed. To become conversant with a range of computer programming paradigms. To develop problem solving skills in computing. To prepare students for software development at higher levels, both in work and study.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Apply knowledge of programming constructs and basic algorithms.
MLO2	2	Demonstrate problem solving skills by producing simple programming solutions.
MLO3	3	Evaluate alternatives and make sound judgements regarding programming solutions.
MLO4	4	Investigate integrated development environments & application programming interfaces.
MLO5	5	Demonstrate basic knowledge of the object oriented programming paradigm.

Module Content

Outline Syllabus	Programming Overview & History The Language & IDE Basic Elements Variables & Constants Operators, Expressions & Statements Using Objects & Methods I/O & File I/O Selection Boolean Operators & Expressions If, If-Else & Switch-Case Iteration While, For & Do-While Break & Continue User-Defined Methods Return Types Parameters Scope Arrays of Value & Reference Type For-Each Multi-Dimensional Object Oriented Design Introduction to UML User-Defined Classes Members Constructors Exceptions & Event Handling Try, Catch & Finally Throwing Graphical User Interfaces Event Driven Programming
Module Overview	
Additional Information	This module imparts upon students, basic programming and problem solving skills that help prepare them for further study in more specialised software development topics.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Portfolio	Simple Application	40	0	MLO1, MLO2
Exam	Complex Application	60	0	MLO3, MLO4, MLO5

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Bo Zhou	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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