

# Problem Solving for Multimedia Computing

## Module Information

2022.01, Approved

### Summary Information

Module Code	4618YCOM
Formal Module Title	Problem Solving for Multimedia Computing
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
YPC International College (Kolej Antarabangsa YPC)

### Learning Methods

Learning Method Type	Hours
Lecture	11
Practical	44

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

## Aims and Outcomes

Aims	To develop skills in computational thinking that can be used to develop programs to solve subject specific problems
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Use computational thinking to design solutions to problems
MLO2	2	Implement design solutions in a suitable programming language
MLO3	3	Develop test plans

## Module Content

Outline Syllabus	Computational thinking – decomposition, pattern recognition, abstraction, algorithms Top-down design/successive refinement Pseudo-code and diagram techniques Practical exercises using compound control structure Practical exercises using methods/functions Solving problems with classes/objects Practical exercises using classes/objects Practical exercises on error handling Testing – test data, test cases, test plans, test strategies (unit, system) Practical exercises on testing
Module Overview	
Additional Information	The practical exercises will be related such that they lead to the development of a larger software implementation.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Design Model	40	0	MLO1
Technology	Software Implementation	60	0	MLO2, MLO3

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Glyn Hughes	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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