

Object Oriented Systems Development

Module Information

2022.01, Approved

Summary Information

Module Code	5104COMP
Formal Module Title	Object Oriented Systems Development
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	33
Practical	22

Module Offering(s)

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

Aims and Outcomes

Aims	To investigate the underpinnings of object orientated design through the unified modelling language. To implement an object oriented design with a modern language and application programming interface. To utilize a modern integrated development environment in developing object oriented program code.
------	--

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Illustrate the concepts of object oriented design.
MLO2	2	Specify object oriented designs using the unified modelling language.
MLO3	3	Implement object oriented designs using object oriented program code.
MLO4	4	Employ an application programming interface using an integrated development environment.

Module Content

Outline Syllabus	OOAD (Object Oriented Analysis & Design) Requirements Analysis Identifying Classes, Attributes & Operations. Identifying Object States / Activities. Verifying Class Design. Collaboration Amongst Objects. Visibility, Navigability & Inheritance. OOP (Object Oriented Programming) Classes & Objects. Arrays. Collections. Generics. Interfaces. Threading. Object Relational Mapping.
Module Overview	
Additional Information	This module explores the object oriented paradigm from analysis, through design, implementation and testing. Initially, the unified modelling language is employed to illustrate key concepts whilst later on; validated designs are matured to fully functioning oriented systems.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Artefacts	UML Report	40	0	MLO1, MLO2
Artefacts	OO Programming	60	0	MLO3, MLO4

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
--------------	--------------------------	-----------