

Cloud Computing

Module Information

2022.01, Approved

Summary Information

Module Code	6012DACOMP
Formal Module Title	Cloud Computing
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22
Seminar	11

Module Offering(s)

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

Aims and Outcomes

Aims	To allow students to develop new advanced cloud-based software development skills and to combine their existing and new skills in a practical context.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically analyse the principles that underpin cloud computing
MLO2	2	Recognise the distributed systems foundations of cloud computing and big data platforms
MLO3	3	Evaluate the most up to date commercial platforms for use in building cloud computing applications
MLO4	4	Critically review common software architectural styles to build cloud applications
MLO5	5	Select appropriate distributed version control to manage applications development
MLO6	6	Evaluate the challenges involved in developing large scale applications with cloud computing

Module Content

Outline Syllabus	<ul style="list-style-type: none"> • Cloud computing and it's enabling technologies – data centres, virtualisation, software defined architecture • Cloud service programming with HTTP and RESTful APIs • Big data tools and programming paradigm with MapReduce and NoSQL databases • Big streaming data analytics with Apache storm • Distributed version control for application development with an focus on git • Load balancing strategies that are used for large scale applications • Publish/subscribe systems for large scale information dissemination.
Module Overview	
Additional Information	A practical module with an emphasis on software development for cloud computing

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Exam	50	2	MLO1, MLO2, MLO3
Report	Report based on specification	50	0	MLO3, MLO4, MLO5, MLO6

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Andrew Attwood	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings