

## Liverpool John Moores University

Title: CLOUD COMPUTING  
Status: Definitive  
Code: **6017KCOM** (118263)  
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences  
Teaching School/Faculty: Kaplan Financial Singapore

Team	Leader
Glyn Hughes	Y

**Academic Level:** FHEQ6  
**Credit Value:** 12.00  
**Total Delivered Hours:** 38.00  
**Total Learning Hours:** 120  
**Private Study:** 82

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	24.000
Tutorial	12.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS2	Examination.	75.0	2.00
Report	AS1	Investigation concerning data centre design.	25.0	

### Aims

*To appreciate the relationship with and variation to the internet and corporate network and in so doing, understand the potential benefits to businesses and consumers.*

*To investigate the hardware and software architecture of Cloud Computing and understand how virtualisation is key to a successful Cloud Computing solution.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Describe the hardware and software concepts and architecture of Cloud Computing.
- 2 Contrast the key technical and commercial issues concerning Cloud Computing versus traditional software models.
- 3 Recognize the importance of virtualisation technology in support of Cloud Computing.
- 4 Specify and design Cloud Computing capable data centres.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2
Data centre design	3	4

## Outline Syllabus

*Overview of the Traditional Software Models.*  
*Internet Infrastructure.*  
*The Data Centre.*  
*Virtualisation Technology.*  
*Rise of Cloud Computing and Virtualisation*  
*SaaS, PaaS & IaaS subsets within Cloud Computing.*  
*Case Study - Benefits to Business and Consumers.*  
*Data Centre Design Considerations.*  
*Windows Azure Platform - Case Study.*  
*Linux - Case Study.*

## Learning Activities

Learning activities will be through lectures and tutorials where students will be encouraged to ask questions and discuss case studies.

## References

<b>Course Material</b>	Book
<b>Author</b>	Vile, A.
<b>Publishing Year</b>	2009
<b>Title</b>	TheSavvyGuideTo HPC, Grid, Data Grid, Virtualisation and Cloud Computing
<b>Subtitle</b>	
<b>Edition</b>	

<b>Publisher</b>	TheSavvyGuide
<b>ISBN</b>	095599070X

<b>Course Material</b>	Book
<b>Author</b>	Jennings, R.
<b>Publishing Year</b>	2009
<b>Title</b>	Cloud Computing with the Windows Azure Platform
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	John Wiley & Sons
<b>ISBN</b>	0470506385

<b>Course Material</b>	Book
<b>Author</b>	Jayaswal, K.
<b>Publishing Year</b>	2005
<b>Title</b>	Administering Data Centers
<b>Subtitle</b>	Servers, Storage, and Voice Over IP
<b>Edition</b>	
<b>Publisher</b>	John Wiley & Sons
<b>ISBN</b>	047177183X

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## Notes

This module covers the history of and current developments in Cloud Computing and its supporting concepts and technology.