

### Summary Information

Module Code	7510YPCM
Formal Module Title	Technology for E-Business
Owning School	Civil Engineering and Built Environment
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

### 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	22
Tutorial	11

### Module Offering(s)

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

## Aims and Outcomes

Aims	To evaluate the effect of distribution, benefits and problems, on the design and implementation of computer based solutions, using performance analysis tools. To critically assess a variety of principles, tools and techniques used for the design of distributed computer systems.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Design and implement a computer system performance evaluation experiment and critically evaluate the result of such experiment.
MLO2	2	Analyse the requirements of a distributed system and critically review the suitability of existing distributed systems paradigm.
MLO3	3	Critically evaluate the application of distributed operating systems and middleware.
MLO4	4	Develop appropriate middleware tools for the design of a distributed application.

## Module Content

Outline Syllabus	Techniques and Methodologies For Performance Evaluation: Evaluation Techniques, Metrics and Workload, Computer-based Simulation.Distributed Computer Systems Architectures: Parallel and Distributed Architectures, The Main Aims Associated With Distributed Solutions.Distributed Systems Concepts and Architectures: Concepts Of Distribution, The Client-Server and Peer-To-Peer Models, Networked Applications, Message Passing, Remote Procedure Calling and Remote Method Invocation Mechanisms.The World Wide Web Model As A Case Study, Performance Enhancing Solutions, Network Operating Systems, Operating Systems, Communications Subsystems and Middleware Technology.Distributed File Systems Design: File Servers, File Replication and Consistency, Caching Mechanisms and Other Performance Enhancing Techniques.
Module Overview	
Additional Information	Modern computing technologies and their trends are presented. The distributed paradigm is analysed, including distributed operating systems and applications. The Client/Server and P2P models and their support for distributed applications is presented. Current hardware technological advances are covered. Middleware case studies are used to illustrate distributed solutions.

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Report	40	0	MLO1, MLO2
Exam	Examination	60	2	MLO3, MLO4

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Rubem Pereira	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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