

## Module Information

2022.01, Approved

### Summary Information

Module Code	4607TECYPC
Formal Module Title	Networks and Information Systems
Owning School	Engineering
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	36
Tutorial	36

### Module Offering(s)

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

## Aims and Outcomes

Aims	This module will provide an appreciation of modern software systems and their configuration, as well as high speed, optical and wireless networks.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Define the concept of network security and authorisation systems
MLO2	2	Research and test an operating system in a networking environment
MLO3	3	Explain how high-speed networking components function and routing methodologies and strategies
MLO4	4	Evaluate concepts behind wireless networking and apply them to industry and in the home

## Module Content

Outline Syllabus	Fundamental data and signals Error detection and error control Operating System multiplexing High speed communications networks: for example Gigabit Ethernet, SDH, MPLS Broadband connections: such as xDSL, FTTH IP protocol suite Routing: routing strategies, routing protocols Wireless networks: IEEE 802.11 family, Bluetooth, 4G/5G Network security – the use of firewalls, encryption and digital certificates. Application performance within networks
Module Overview	
Additional Information	This level 4 module covers the areas of operating systems configuration in a networking environment, high-speed networking and wireless networks

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Group Report	50	0	MLO1, MLO2
Exam	Examination	50	2	MLO3, MLO4

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Karl Jones	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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