

## Liverpool John Moores University

Title: Networks and System Connectivity  
Status: Definitive  
Code: **5079ENG** (116950)  
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering  
Teaching School/Faculty: Electronics and Electrical Engineering

Team	Leader
Ronan McMahon	Y

**Academic Level:** FHEQ5      **Credit Value:** 20      **Total Delivered Hours:** 40  
**Total Learning Hours:** 200      **Private Study:** 160

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	20
Practical	20

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Technology	Tech		40	
Technology	Tech		30	
Technology	Tech		30	

### Aims

*The module expands computer knowledge and introduces the basics of networking.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a theoretical and practical knowledge of server hardware and software; administration and technical requirements
- 2 Demonstrate a theoretical and practical knowledge of Networking

### **Learning Outcomes of Assessments**

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

Technology	1	2
Technology	1	2
Technology	1	2

### **Outline Syllabus**

*Network Introduction : Topologies, Network Connections, Ethernet and the TCP/IP Protocol suite*

*Network hardware: Cabling, NICs, Repeaters, Hubs, Bridges, Switches and Routers. The OSI seven layer network architecture.*

*Server software overview*

*Active directory and account management basics, Managing users, resources and security*

*DNS, forests, trees, trusts, Organisational Units*

*Security : ports, IPsec - encryption, Certificates, firewalls and web access*

*Threats : Virus, worms, Trojans, spyware, malware*

*RAID types and applications,*

*UPS, continuation of service, Asset safety and Computer Audit*

### **Learning Activities**

Lectures and lab work

### **Notes**

The module gives students the opportunity to develop their networking knowledge in a variety of situations.