

Liverpool John Moores University

Title: NETWORK PROTOCOLS, SECURITY AND MANAGEMENT
Status: Definitive
Code: **6013ENG** (106218)
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: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 86

Total Learning Hours: 240 **Private Study:** 154

Delivery Options

Course typically offered: Summer

Component	Contact Hours
Lecture	48
Practical	12
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	50	2
Report	AS2	Coursework 1	25	
Report	AS3	Coursework 2	25	

Aims

Students will be able to differentiate between different protocols, and select according to need. Students will be able to determine and assess security threats, and devise a suitable course of action. Students will be able to design/select/integrate suitable network management structures.

Learning Outcomes

After completing the module the student should be able to:

- 1 Explain properties of different protocols and evaluate their suitability to various situations
- 2 Identify and discuss key elements of Network Management
- 3 Analyse and debate Security requirements and options
- 4 Identify and discuss issues relating to network traffic

Learning Outcomes of Assessments

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

EXAM	1	2	3	4
CW	1	4		
CW	2	3		

Outline Syllabus

Review of OSI 7-layer and Internet reference models
Protocols: Network Access, High speed communications networks
Wireless networks: 802.11, 802.16, Bluetooth
Optical Networks
IP Networks: Routing and Applications
Telephony: Fixed, Mobile
Storage Networks
Network management:
Network Security.

Learning Activities

Typically by a series of lectures, tutorials, and practicals.

Notes

This module extends the knowledge of network protocols as well as security and management issues.