

## Liverpool John Moores University

Title: Web Casting, Streaming and Networks  
Status: Definitive  
Code: **6005AMP** (120144)  
Version Start Date: 01-08-2019

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

Team	Leader
Ronan McMahon	Y

**Academic Level:** FHEQ6      **Credit Value:** 12      **Total Delivered Hours:** 72  
**Total Learning Hours:** 120      **Private Study:** 48

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Tutorial	48

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Technology	AS1	Lab sequence followed by a lab test	40	
Test	AS2	A series of In Class tests	30	
Report	AS3	A report	30	

### Aims

*To develop an understanding and ability to implement, operate and manage media streaming, media servers and associated network hardware and software.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a theoretical understanding of servers and networks
- 2 Demonstrate an understanding of the principles involved in specifying a multimedia distribution environment
- 3 Implement streaming of live and recorded media in a networking environment

### **Learning Outcomes of Assessments**

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

Lab Sequence plus lab test	3
Series of In Class Tests	1
Report	2

### **Outline Syllabus**

*Media: multimedia content – audio, video etc., Encoders; file types; formats; playout and live sources*

*Computer Architecture: Memory (Internal & External); Processors; Busses; Operating systems; Servers and Clients*

*Networks: Links: Local networks, Wide area networks, Internet, Ethernet, IP, TCP, UDP, (streaming protocols), DNS, security, bandwidth, capacity*

*Media Servers: Installation, configuration, content, bandwidth, capacity, connectivity*

### **Learning Activities**

A series of Lectures and Lab sessions

### **Notes**

This module introduces students to the principles and practice associated with streaming of multimedia content in a networking environment