

## Liverpool John Moores University

Title: Devices, Apps and Streaming  
Status: Definitive  
Code: **6201AMP** (121892)  
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering  
Teaching School/Faculty: Engineering

Team	Leader
Ronan McMahon	Y
Karl Jones	

**Academic Level:** FHEQ6      **Credit Value:** 20      **Total Delivered Hours:** 44  
**Total Learning Hours:** 200      **Private Study:** 156

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	11
Practical	33

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report	30	
Practice	AS2	Implementation	70	

### Aims

*To introduce techniques used to distribute multimedia information.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Develop analogue and digital devices, to interface with mobile Apps using wired and wireless technologies.
- 2 Integrate Apps with streaming technologies.
- 3 Analyse a multimedia networking environment.
- 4 Configure streaming services.

## Learning Outcomes of Assessments

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

Report	3				
Implementation	1	2	3	4	

## Outline Syllabus

*IDE and sensors, e.g. for use with Arduino*  
*Microcontroller coding, such as for Arduino*  
*Introduction to Apps, such as Android (Google) Apps, Apple Apps, Windows Apps*  
*Application Programme Interfacing, e.g. Google API and Google Drive*  
*Apps coding, e.g. for Android*  
*Bluetooth and WIFI device interfacing*

*Network structures and environment*  
*Quality of Service*  
*Ethernet, WLAN, IP, TCP, UDP, DNS, Addressing, Security*  
*Local versus Cloud based streaming services*  
*Analogue, Digital, Codecs*  
*Network and storage capacity*  
*Service configuration.*

## Learning Activities

Lectures and practical sessions

## Notes

Introduces Interfacing and Networking in a Multimedia Environment.