

# Mobile Devices and Wireless Technology

## Module Information

2022.01, Approved

### Summary Information

Module Code	5171CSD
Formal Module Title	Mobile Devices and Wireless Technology
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

### Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

### Learning Methods

Learning Method Type	Hours
Lecture	16
Practical	12
Tutorial	8

### Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

### Aims and Outcomes

Aims	The modern world is a connected world. One where people can interact and expect to control and manage their lives remotely, wherever they may be. Smartphones and other tablet computers have driven that need to shop, bank, control the home environment, stream music and TV programmes and other limitless application, at a time when you want to. This module will explore those mobile devices and the wireless communications technologies that enable it all to happen.
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**After completing the module the student should be able to:**

**Learning Outcomes**

Code	Number	Description
MLO1	1	Demonstrate a clear understanding of various wireless technologies used in everyday activities, in terms of their technical specifications and boundaries, performance limitations and methods of evaluation.
MLO2	2	Design wireless hardware solutions for a given practical problem.
MLO3	3	Create a wireless embedded solution and critically evaluate performance metrics.

**Module Content**

Outline Syllabus	Radio Technologies:802.15.4, 802.11, Bluetooth and other proprietary systems.Hardware Platforms:Module selection, driver development.Software:Simulation and analysis.Data and information security.
Module Overview	
Additional Information	This module explores the wireless technologies, hardware implementations and simulation of smart solutions.

**Assessments**

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Report	70	0	MLO1, MLO2, MLO3
Centralised Exam	Lab	30	0	MLO1, MLO2, MLO3

**Module Contacts**

**Module Leader**

Contact Name	Applies to all offerings	Offerings
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**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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