

## Liverpool John Moores University

Title: Applied Computing  
Status: Definitive  
Code: **3211FNDCMP** (127959)  
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics  
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Robert Askwith	Y

**Academic Level:** FHEQ3      **Credit Value:** 20      **Total Delivered Hours:** 44  
**Total Learning Hours:** 200      **Private Study:** 156

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Workshop	22

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Review of computing solutions	40	
Report	AS2	Proposal of a solution to a contemporary computing problem	60	

### Aims

- The module aims to build students' knowledge of contemporary real-world applications of computing and information technology.
- The module aims to explore scientific, technology and engineering concepts in computing with respect to the deployment of large scale information systems.

*-The module aims to equip students with skills to research case studies around a particular computing theme.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Identify relevant information relating to contemporary computing applications
- 2 Compare solutions for large computing problems
- 3 Combine information from a variety of sources to support a proposal
- 4 Apply computing knowledge to a real-world scenario

## **Learning Outcomes of Assessments**

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

Review of computing solutions	1	2
Proposal of a solution	3	4

## **Outline Syllabus**

*The module will be delivered as set of topics on contemporary uses of computing to deliver large-scale solutions. The list of topics may vary each year but could include:*

- *Cloud Computing*
- *Big Data*
- *Cryptography*
- *Virtual / Augmented Reality*
- *Serious Games*
- *Mobile / Wireless Networks*
- *Internet of Things (IoT)*

*Case studies involving application of these topics in industries such as:*

- *Emergency services*
- *Healthcare*
- *Sport*
- *Law Enforcement*
- *Environment*
- *Government*
- *Transport/logistics*
- *Marketing*

## **Learning Activities**

Lectures on contemporary applied computing topics will be complemented with lab sessions encouraging students to research information and develop high-level

solutions to related problems.

## **Notes**

The emphasis will be on the underlying computing challenges of large-scale applications of the kind regularly featured in the general media. The intention is to demystify these applications and spark students' interest in the underlying computing challenges and solutions.