

Liverpool John Moores University

Title: Cloud and Mobile Forensics
Status: Definitive
Code: **6204COMP** (128004)
Version Start Date: 01-08-2021

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

Team	Leader
Alex Akinbi	Y
Phil Kendrick	

Academic Level: FHEQ6 **Credit Value:** 20 **Total Delivered Hours:** 46
Total Learning Hours: 200 **Private Study:** 154

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Practical	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Forensic investigation of a range of mobile devices	50	
Exam	AS2	Examination	50	2

Aims

*To develop an advanced knowledge of mobile device forensics.
To gain experience of conducting forensic investigations on a range of mobile devices.
To understand the organisation and operation of Cloud Computing systems.
To critically assess the opportunities and challenges of cloud forensics.*

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically evaluate the forensic investigation of mobile devices
- 2 Apply advanced knowledge of mobile device forensics
- 3 Critically evaluate forensic implications of an investigation involving cloud computing
- 4 Develop a plan for performing complex cloud computing forensics

Learning Outcomes of Assessments

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

Mobile Phone Investigation Examination	1	2
	3	4

Outline Syllabus

Mobile Device Forensics: introduction to mobile network, SIM cards and mobile devices. SIM card forensics and 'Feature' handset forensics. Location data and common challenges. Smartphone forensics. Android, iOS and introduction to Internet of Things (IoT) forensics.

Cloud Computing Forensics: Introduction to cloud Computing, cloud deployment and service models. Cloud computing services and data storage. Cloud security and attack patterns. Cloud forensics and challenges.

Learning Activities

Students will participate in lectures and practical lab sessions.

Notes

With the rise of smartphones and the explosion of apps running on them that are supported by extensive back-end services, two of the most significant new areas of computing are mobile devices and cloud computing. With this massive rise in usage, new areas of digital forensics are now emerging to cater for the investigation of those user devices and the backend infrastructure respectively. This module will examine how forensic investigations can be conducted in this area and identify the key similarities and differences involved.