

Module code: MOD009086	Version: 1 Date Amended: 14/Dec/2022
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1. Module Title
Mobile Forensics

2a. Module Leader
Andrew Moore

2b. School
School of Computing and Information Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
6

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours
150

5. Restrictions			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

Mobile forensics is the scientific process of preserving, extracting and interpreting data from mobile devices (such as phones and tablets). The Mobile Forensics module will dive into the filesystem and metadata from mobile devices, focusing on Android (the world's most popular operating system). This module will go through how to best preserve data from a mobile device and the different types of extraction (physical, logical, filesystem). This extracted data will be analysed to explain what the user of this phone was doing at a given time, where they were and how this could evidentially be relevant in an investigation.

6b. Outline Content

- Understanding mobile devices and how they function
- Understand the OS and file systems of mobile devices
- How data can be taken from a mobile device safely
- Exposure to software and hardware used in mobile forensics, such as Cellebrite
- Using mobile artefacts in an investigation
- Producing paperwork for a mobile phone investigation

6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

6d. Specialist Learning Resources

- Android devices such as phones and tablets for testing
- Forensic software such as Cellebrite, X-ways and open-source forensic software
- Digital forensics lab
- Netlab

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Understand the inner workings of a mobile operating system
2	Knowledge and Understanding	Critically evaluate the differences in forensic processes for mobile devices
3	Intellectual, practical, affective and transferrable skills	Scientifically preserve and extract data from mobile devices
4	Intellectual, practical, affective and transferrable skills	Interpret extracted data from a mobile device to see patterns of user interaction

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2026/7	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	12	1-2	Lecture 1 hr x 12 weeks
Other teacher managed learning	24	3-4	Laboratory 2 hr x 12 weeks
Student managed learning	114	1-4	2 hr/week preparation for, and reflection on, laboratories, 90 hrs in total for background reading and preparation for coursework submission
TOTAL:	150		

9. Assessment for the above Module Occurrence

The assessment for some modules includes a presentation (see below for details on how this particular module is assessed). We recognise that presenting, especially to a large group, can cause significant anxiety or distress for some students. If this may affect you, please contact your Module Leader or the Disability and Neurodiversity Service as early as possible. We will work with you to consider appropriate reasonable adjustments. Depending on your individual needs, these might include, for example, presenting to a smaller group or presenting only to a member of academic staff.

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1-4	100 (%)	Fine Grade	30 (%)

Coursework submission of mobile forensics case report. Word count: 3000 words

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above**
- (b) pass any pass/fail elements**

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]