

INFO 3014 DIGITAL INVESTIGATIONS AND FORENSICS

Credit Points 10

Legacy Code 102701

Coordinator Abubakar Bello ([https://directory.westernsydney.edu.au/search/name/Abubakar Bello/](https://directory.westernsydney.edu.au/search/name/Abubakar%20Bello/))

Description This unit focuses on the concepts, theories, and practice of digital investigations and forensics. More specifically, it focuses on using a detailed hands-on approach to the use of computer technology in investigating and demonstrating that particular digital media contains incriminating evidence. With topics ranging from data acquisition, file systems examination, social media, email and network investigations, mobile and cloud forensics, a working knowledge of how to approach digital investigations and utilise various forensic tools to collect, analyse and present digital evidence will be gained. In this unit, digital investigations and forensics is covered from both a theory-based and applied understanding of how to recover admissible legal evidence after an incident, or proactively as a key defence to reduce the likelihood of cyber attacks.

School Social Sciences

Discipline Security Science

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) INFS 1002 AND INFO 2001 OR INFO 2004

Assumed Knowledge

A basic understanding of computer systems, architecture, infrastructure, internet protocols and networking protocols. A basic understanding of core theories related to social and cognitive psychology is desirable.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Explain the process of digital investigations and forensics on digital media.
2. Design a proactive digital investigation process to detect and prevent exposure to cyber attacks in organisations.
3. Identify and recover key evidence from digital media using a variety of forensic tools.
4. Conduct and manage digital investigations and forensics involving digital media
5. Demonstrate an understanding of the ethical principles and practice for digital forensic investigators.
6. Present clear evidence and conclusions of a digital investigation in report form.
7. Define the methods, theories, and terms related to digital investigations and forensics.

Subject Content

Fundamentals of digital investigations and forensics
 Processing attack and incident scenes
 Data acquisition, analysis, and validation
 Network, mobile and cloud forensics
 Email and social media forensic investigations
 Current digital forensics tools
 Digital evidence and report writing for high-tech investigations
 Ethical issues for digital investigations and forensics

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Quiz	10 x 10 MCQ ea	10	N	Individual
Report	2,000 words	30	N	Group
Practical	10 lab projects	20	N	Individual
Final Exam	2 hours	40	N	Individual

Prescribed Texts

- Nelson, B., Phillips, A., & Steuart, C. (2019). Guide to computer forensics and investigations: Processing digital evidence. Cengage Learning.

Teaching Periods

Autumn

Parramatta - Victoria Rd

Day

Subject Contact Abubakar Bello ([https://directory.westernsydney.edu.au/search/name/Abubakar Bello/](https://directory.westernsydney.edu.au/search/name/Abubakar%20Bello/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFO3014_22-AUT_PS_D#subjects)

WSU Online TRI-1

Wsu Online

Online

Subject Contact Natasha Daraio ([https://directory.westernsydney.edu.au/search/name/Natasha Daraio/](https://directory.westernsydney.edu.au/search/name/Natasha%20Daraio/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFO3014_22-OT1_OW_O#subjects)

WSU Online TRI-3

Wsu Online

Online

Subject Contact Karen Harvey ([https://directory.westernsydney.edu.au/search/name/Karen Harvey/](https://directory.westernsydney.edu.au/search/name/Karen%20Harvey/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFO3014_22-OT3_OW_O#subjects)