# **Liverpool** John Moores University

Title: INFORMATION ASSURANCE

Status: Definitive

Code: **5021DACOMP** (125365)

Version Start Date: 01-08-2021

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

Team	Leader
Robert Askwith	Υ

Academic Credit Total

Level: FHEQ5 Value: 20 Delivered 57

Hours:

Total Private

Learning 200 Study: 143

Hours:

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours	
Lecture	22	
Practical	11	
Tutorial	22	

**Grading Basis:** 40 %

## **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Security Analysis	40	
Exam	AS1	Examination	60	2

## **Aims**

To provide a detailed understanding of the main concepts of Information Assurance.

To develop an appreciation of the process of information security management, including risk analysis, control analysis and post-event security.

To develop an awareness of the standards relating to information assurance within

enterprise environments, including legal and compliance issues.

## **Learning Outcomes**

After completing the module the student should be able to:

- Analyse security risks associated with a computer system using a standard methodology
- 2 Interpret legal, governance and compliance issues for information assurance
- 3 Identify success factors in information security management

## **Learning Outcomes of Assessments**

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

Security Analysis 1

Examination 2 3

# **Outline Syllabus**

Concepts in Information Assurance; threats, vulnerabilities, attacks, models for discussing security, situational awareness, economic and business constraints, technology controls, human factors, ethics, 'cyber'.

Risk Assessment; understanding risk factors, methods for risk assessment, standards including USA NIST and UK CESG.

Information Security Management: governance and compliance, 'Quality' and the need for audit, standards including PCI-DSS and ISO 27001.

Law: cyber-crime and related laws including CMA, DPA, RIPA. Related issues around 'conflicts' of privacy and free-speech.

Post-event Security: attacks, incident response, disaster recovery, forensics and involvement of law enforcement.

## **Learning Activities**

Students will participate in lectures, tutorials, and lab sessions. This module will be delivered online.

#### **Notes**

The term Information Assurance generally refers to the wide range of activities that information security practitioners engage in, although typically excludes the actual development of solutions through software development. In this module the focus is

on the analysis, management and information governance aspects of being an IA practitioner.