

Liverpool John Moores University

Title: INFORMATION ASSURANCE
Status: Definitive
Code: **5119COMP** (121245)
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: FHEQ5
Credit Value: 20
Total Delivered Hours: 57
Total Learning Hours: 200
Private Study: 143

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:

- 1 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.

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.