

Secure Systems

Module Information

2022.01, Approved

Summary Information

Module Code	7542CYQR
Formal Module Title	Secure Systems
Owning School	Computer Science and Mathematics
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Oryx Universal College WLL

Learning Methods

Learning Method Type	Hours
Lecture	11
Practical	22

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks
JAN-PAR	PAR	January	12 Weeks

SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks
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Aims and Outcomes

Aims	To familiarise students with common system security techniques, tools and methods that can be utilised during the design, deployment and maintenance of systems. To allow students to develop new advanced security skills and to combine their existing and new skills in a practical context.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Display critical awareness of the relationship between theoretical and practical security concepts and their implementation.
MLO2	2	Apply technical and conceptual skills to the task of securing a complex computer system
MLO3	3	Critically evaluate practical configuration, diagnostic and problem solving techniques for security complex computer systems

Module Content

Outline Syllabus	Common concepts of securing systems Infrastructure design & topologies Secure Networking Application security Secure administration & defence Event monitoring and analysis Access control and authentication Securely implementing common servers System configuration & automation Patching and vulnerability management
Module Overview	
Additional Information	This module provides an opportunity for students to gain both theoretical and practical knowledge and experience in creating and managing secure systems.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Essay	Secure system report	40	0	MLO1
Report	Secure system implementation	60	0	MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Nathan Shone	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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