

Advanced Topics in Network Security

Module Information

2022.01, Approved

Summary Information

Module Code	7110COMP
Formal Module Title	Advanced Topics in Network Security
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	
Computer Science and Mathematics	

Learning Methods

Learning Method Type	Hours
Lecture	12
Seminar	24

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	СТҮ	January	12 Weeks

Aims and Outcomes

Aims	To provide students with an opportunity to experience cutting edge development inNetwork Security by studying recent academic research in the area. To provide students with an opportunity to practise research skills, such as scientificwriting, presentations, and proposal writing.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Conduct research relating to Network Security.
MLO2	2	Display advanced knowledge of one or more issues within Network Security.
MLO3	3	Demonstrate expertise in applying knowledge to Network Security problems.
MLO4	4	Demonstrate skills in the communication of research findings.

Module Content

Outline Syllabus	Topics will reflect the current research in network security, including that being undertaken within the school, and may include (but are not limited to):- Internet of Things security- Malware- Formal specifications and logics- Denial of Service protection- Cryptography- Anonymity and Privacy Enhancing Technologies- Sensor Network Security- System-of- systems Security- Critical Information Infrastructure Protection- Big Data analysis for security- Visualisation for security- Serious games in security- Digital Rights Management
Module Overview	The focus of this module is on examining current research issues and agendas within Network Security. It aims to provide you with an opportunity to:
	develop your understanding of Network Security by studying recent academic research in the area practise research skills, such as scientific writing, presentations, and proposal writing
Additional Information	The focus of the module is on examining current research issues and agendas withinNetwork Security. Students are encouraged to develop their research skills, through conducting literature investigations and proposing ideas in a seminar setting.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Research paper	100	0	MLO1, MLO2, MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Qi Shi	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings	
--------------	--------------------------	-----------	--