

## Module Information

2022.01, Approved

### Summary Information

Module Code	7102COMP
Formal Module Title	Information and Social Networks
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
Tutorial	24

### Module Offering(s)

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

### Aims and Outcomes

Aims	To study how the social, technological, and natural worlds are connected. To understand how elementary graph-theoretic concepts may help understanding the structure and certain properties of networks. To understand the software development possibilities offered by the emergence of information and social networks environments.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Identify the main issues, techniques, and tools needed for the development of applications in the area of Information and social networks.
MLO2	2	Use mathematical techniques to model and analyse structural and dynamical properties of networks.
MLO3	3	Identify patterns of internal structure on the networks and their effects on the population.

### Module Content

Outline Syllabus	Fundamental ideas from social network analysis and framing a number of graph-theoretic concepts in these terms. Web graph, link analysis for Web search. Empirical studies of on-line social networks. Technical issues in social networking such as large scale network modelling and the information propagation.
Module Overview	<p>The aim of this module is to provide you knowledge as to how the social, technological, and natural worlds are connected. It:</p> <p>helps you to understand how elementary graph-theoretic concepts may help understanding the structure and certain properties of networks</p> <p>enables you to understand the software development possibilities offered by the emergence of information and social networks environments</p>
Additional Information	This course covers different scientific perspectives in its approach to understanding networks and behaviour.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Critical survey	50	0	MLO1
Centralised Exam	Examination	50	2	MLO2, MLO3

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Somasundaram Ravindran	Yes	N/A

**Partner Module Team**

Contact Name	Applies to all offerings	Offerings
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