

Summary Information

Module Code	3100FNDET
Formal Module Title	Algorithms and Computing
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 3
Grading Schema	40

Module Contacts**Module Leader**

Contact Name	Applies to all offerings	Offerings
Kirsty Lever	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
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Lecture	22
Practical	11

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	This module aims to provide students with an introduction to technical computing and the application of computers in the implementation of simple algorithms. This is supported by a syllabus which covers the key elements of decision mathematics and an introduction to computer programming. - To introduce the student to the area of computer systems.- To provide an understanding of the underlying computing platform (hardware, OS, network) upon which applications are developed and hosted.- To introduce students the key elements of decision mathematics and simple algorithms.
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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Identify the main components of standard computer hardware architectures, the role of an operating system, the file system, networking and standard hardware interfaces.
MLO2	Explain the fundamental concepts and issues involved in computer networking.
MLO3	Describe the fundamental principles of decision mathematics and the characteristics of an algorithm.

Module Content

Outline Syllabus
The list below provides an indicative list of topics which may be covered in this module:Computer Systems Architecture HardwareSoftwareNetworksNumber Systems and LogicIntroduction to AlgorithmsCorrectnessFinitenessGeneralityStopping ConditionsDescribing AlgorithmsFlow ChartsPseudo CodeExample Algorithms

Module Overview
This module aims to provide an introduction to technical computing and the application of computers in the implementation of simple algorithms.

Additional Information

This module introduces the student to the fundamental concepts of the computer science field and their practical application

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Centralised Exam	Examination	100	1.5	MLO2, MLO1, MLO3