



A Level in Computer Science

Location	Marple College
Course Type	College 16-18
Department	A Levels
Start Date	Monday 2nd September 2024
Course Code	MFQ-ML3L-1115

Course Overview

Computer Science is relevant to the modern and changing world of computing. Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems. It's an intensely creative subject that combines invention and excitement, and can look at the natural world through a digital prism. The aim of this qualification is to enable learners to develop an understanding and ability to apply the fundamental principles and concepts of computer science.

Course Requirements

General entry requirements for our A Levels include 5 GCSEs grade 5 or above, including English Language and Maths. Additional subject requirements include a minimum of a grade 6 in Maths and another grade 6 in a relevant subject (e.g. Science, Maths, Computer Science). You must be passionate about Computer Science with a determination to succeed. You do not need to have studied Computer Science at GCSE however experience of programming is expected.

What You Will Learn

This course will give students an understanding of the fundamental concepts of computer science, while developing their ability to problem solve and to think logically, as well as innovatively, about such problems. Topics of A Level Computer Science include the fundamentals of programming and algorithms, fundamentals of data representation, and the theory of computing.

Assessment

The A Level in Computer Science is a linear qualification it is divided into three components
External assessment - Computer Systems (40%)140 marks2 hours and 30 minutes written paper
External assessment - Algorithms and programming (40%)140 marks2 hours and 30 minutes written paper
Programming project (20%)Coursework - 70 marks

Progression

You could progress to a related Higher Education course in Computer Science.

This course is also well thought of by employers for students wanting to go straight into employment.

Career Options

This course gives you a clear path into computing related careers, such as IT support, network developer, software engineer, or cyber security,

Mandatory Units

The A Level Computer Science specification includes: - The characteristics of contemporary processors, input, output and storage devices.- Software and software development - Exchanging data- Data types, data structures and algorithms- Legal, moral, cultural and ethical issues- Elements of computational thinking- Problem solving and programming- Algorithms to solve problems and standard algorithms
The learner will choose a computing problem to work through as part of their coursework consisting of: Analysis of the problem Design of the solution Developing the solution Evaluation

Contact Details

For further information please contact T: 0161 886 7070 or E: info@trafford.ac.uk

Disclaimer

Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.