

# Nower Hill 6th Form:

*Inspiration, excellence,  
opportunity - a confident future*

## Computer Science A Level



Who is the course for?

This specification gives a general grounding in computing, including an understanding of computer systems, the principles of programming, and the solving of problems.

What can it lead to?

Excellent preparation for students wishing to pursue further studies or careers in computing.

What will I Study?

Programming constitutes a significant proportion of the course, building on skills developed at GCSE. Student will develop skills in computational thinking, problem solving and using Algorithms.

How computer systems work including processors, software, data types, data structures, algorithms as well as the legal, moral, cultural, ethical issues associate with the use of computer systems.

Mathematical skills in relation to computer science and computational thinking.

Computational thinking to develop the skills to solve problems, design systems and understand human and machine intelligence.

Applying the academic principles learned in the classroom to real world systems as part of the programming project which includes analysis, design, development and evaluation of a solution.

How will I be taught?

Theory supported by a large element of practical application. Some group or pair work will be required.

How will I be assessed?

### Written paper

Paper 1 Computer Systems	40% of total A level
Paper 2 Algorithms & Programming	40% of total A level

### Coursework

Programming project	20% of total A level
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What Equipment or materials will I need?

Standard stationery and writing materials, plus storage facility eg CD/USB flash drive

What are the entry requirements?

Maths GCSE grade 6 or above and Computer Science GCSE at grade 5 or above.