

PRE-COURSE ACTIVITIES

SUBJECT

A level Computer Science

We are delighted that you are keen on studying A level Computer Science and we look forward to working with you over the next two years.

Good luck in your GCSE's, from Mr Atkinson and Mr Snow.

NOT STUDIED COMPUTER SCIENCE BEFORE?

It is important that you have a basic understanding of Python Programming.

Use the following website to complete the sections on Inputs and Outputs, Selection, Fixed Iteration, Conditional Iteration, String Functions, MOD and DIV, Subroutines, 1D Arrays and Lists, 2D Arrays.

<https://www.gocodeit.online/projectselect>

You should keep evidence of completing each of the tasks.

Each task has a video to support your completion of the task with the answers, however, you should aim to complete the tasks without looking at the answers.

STUDIED COMPUTER SCIENCE BEFORE

It is important that you develop your understanding of Python Programming.

Use the following website to complete the sections on subroutines, 2D arrays, searching and sorting algorithms.

<https://www.gocodeit.online/projectselect>

You should keep evidence of completing each of the tasks.

Each task has a video to support your completion of the task with the answers, however, you should aim to complete the tasks without looking at

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<https://www.scienceandindustrymuseum.org.uk/whats-on/meet-baby>

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ANSWER THIS

Describe the differences in architecture, functionality, and potential applications between classical computers and quantum computers. Use labelled diagrams to illustrate key concepts in your explanation.