A-Level Computer Science

Examining Board: **AQA** -
https://www.aqa.org.uk/subjects/computer-science/a-level/computer-science-7517/specification

Programming Language Used: **Python** (Version 3 onwards) - https://www.python.org/downloads/

The course is made up of *Theory Units* and *Programming* (a LOT of programming!).

Programming in Python

Download Python onto your devices and begin coding basic programs such as *Guess the Number*, *Rock Paper Scissors, Hangman, Connect4* etc. We recommend that you use the following book available online from many retailers:
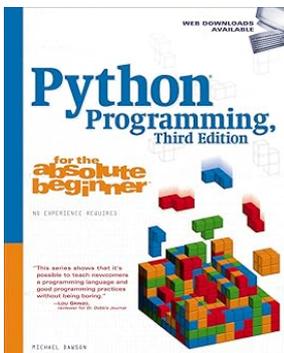
Python Programming for the Absolute Beginner by Mike Dawson.

Websites that are useful for Programming challenges:

http://www.pythonbytesize.com/video-index.html

https://edabit.com/challenges/python3

Theory Sessions

We strongly recommend you subscribe to "Craigndave" Channel. This covers our specification and offers quick, bite size videos to get you started:

https://student.craigndave.org/aqa-alevel-videos

You are welcome to watch as many bitesize videos as you can, but begin by focusing on:

- SLR10 - Number systems and bases (and SLR11 - Binary)
- SLR12 - Coding text and graphics (and SLR13 - Coding sound and music)

Additionally you may want to purchase the official text book (although this is **not** mandatory):
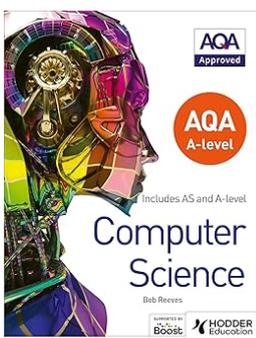
AQA A-Level Computer Science by Bob Reeves

Some of the topics we will cover:

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Networks              Databases & SQL Programming
The Internet          Low Level Language Programming
Boolean & Logic       Functional Programming
Data Structures       Internal Architecture
Legal Issue           Algorithm Efficiency
The Turing Machine    Maths in Computing
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