

## Transition to A-level Computing

The A-level course is designed to be taught with the expectation that students may not have experience of GCSE Computing. However, there are some things you can do to help prepare for the course.

- Practice some python coding to remind yourself what the course involves.  
<https://www.learnpython.org/>
- Read the specification and have a look at past papers to give yourself an idea of the content and what to expect.
- <https://www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517>
- Make sure you have python installed on your home computer/laptop in time.  
<https://www.python.org/downloads/>
- We use the Pygame external module for your course project.  
<https://pypi.org/project/pygame/#files>
- The new aspect of coding is making use of “classes”. You could research what they are and perhaps try using one in python if you are advanced enough.
- Finally, databases are in the A-level specification which was not in the GCSE specification. You could attempt to make a simple database table using Microsoft Access and getting familiar with the basics.

## Optional Assignment – beginner

<https://edabit.com/challenges/python3>

The above site allows you to code and practice without installing any software yourself.

Using the above site – try out some of the “Level 0” challenges. If you’ve never done python before use <https://www.learnpython.org/> for the basics first.

Once you get the hang of it you can “level up” and try some of the harder challenges.

## Optional Assignment - advanced

Try and get pygame installed on your computer. It is designed to create simple 2d games and other animated scenes.

Follow the tutorial here and see if you can eventually get an image you’ve downloaded displayed on the screen and moving with keyboard commands.

<https://pythonprogramming.net/pygame-python-3-part-1-intro/>