Pre-entry Preparation, Requirements and Recommendations

Welcome to A-Level Computer Science and IT (Cambridge Technicals) at St Peters 6th Form.

Preparation

Much of Computing is based around problem solving. You can sharpen your problem-solving skills by practising logic problems. There are many available online.

Continue to practise your programming skills. We will be using Python throughout the course. There are many free coding courses online such as:

- www.codeacademy.com
- www.learnpython.org
- snakify.org

It is especially important that you go through some Python tutorials if you did not do GCSE computer science.

Also you should sign up for https://isaaccomputerscience.org/

Take a look at www.mangolearning.academy

Here there are a complete set of resources for A level computer science that you can look at.

Requirements

It would be helpful if you have your own laptop/home computer but this is not essential. All programming software that we use is free. If you do have your own computer it would be good to install some or all of the Python IDEs below:

- IDLE (https://www.python.org/downloads/)
- Pycharm (https://www.jetbrains.com/pycharm/)
- Pyscripter (https://www.softpedia.com/get/Programming/Coding-languages-Compilers/PyScripter.shtml)

Transition Work

Transition work will be collected in at the start of the academic year and students will receive feedback. It is a vital method of preparing students for the course and will give them a head start with some basic concepts.

IT (Cambridge Technicals)

Research the different PC hardware components alongside the difference between gaming PC's and general purpose PC's with examples (office PCs, streamer PCs, PCs used for CAD software etc). This can be done as a Word document or a PowerPoint, preferably with at least 5 examples.

Computer Science

Python is a core part of the course, so more practice students do the better their programming skills will be. Use this website to choose at least 2 of each difficulty (1 to 4) and to take screenshots of all your code (whether it works or not!) and paste them into a Word document.

https://www.practicepython.org/

If you have any queries about the course preparation, please contact either Miss Fox (lfox@stpetershuntingdon.org) or Mr Jones (kjones@stpetershuntingdon.org)