



A level Computer Science- Transition Work

Welcome to Computer Science at Ribston Hall High School. We look forward to teaching you next academic year.

Completion of the transition work is essential to achieving your desired grade and so continuing your life journey, whatever path you choose. The aim of the transition work is to ensure you have grounding in key computing concepts so we can build on those during the course.

The platform we use for transition work is ISAAC computing [Isaac Computer Science](#). Please create a login here (using your personal email) and join the group for your class using the code **TE7AFA**. You can do this using the following link

<https://isaacomputerscience.org/account?authToken=TE7AFA>

Work through the following five sections and complete the gameboard for each. I can view your progress on the website.

Theory

- [GCSE Data representation](#)
- [GCSE Boolean logic](#)
- [GCSE Systems](#)
- [GCSE Networking](#)

Programming/Practical

- [GCSE Programming concepts](#)

If you have not done much/any programming.

You might find it helpful to do an online course/tutorial on Python as this a language used for examples in class. There are many of these available, choose one the suits you.

A course I recommend is below. This is set up to be done over 6 weeks. The expectation is that someone who knows another programming language and is just trying to learn Python should be able to go through the material in this course in 2-3 weeks, while someone with no programming background will take 5-6 weeks.

[Programming for Everybody \(Getting Started with Python\) - Online Course \(futurelearn.com\)](#)

Ribston Hall High School

Reading

Not required, however, some books you might enjoy.

- *The Most Complex Machine* by David Eck

A great book for A Level, supported by a wonderful website with lots of interactive labs.

- *Computational Fairy Tales* by Jeremy Kubica

This book introduces dozens of aspects of computational design. It gives an overview of these aspects, whetting the appetite to learn more. Using analogies from fairy tales, Mr. Kubica inspires readers to take in each concept and then extend their learning on their own.

- *Hackers* by Steven Levy

This book traces the history of Hackers, from clunky computer card punching machines to the inner secrets of what would become the internet. With ground-breaking profiles of Bill Gates, Steve Wozniak, MIT railroad club and more; the shapers of the digital revolution.