# Computer Science Reading List

The Computer Science department has prepared some suggested reading and activities:

 http://www.cs.ox.ac.uk/admissions/undergraduate/why\_oxford/background\_reading.html

This list is quite wide-ranging, and is there to give you some general ideas of interesting things to look at.

No preliminary reading is formally required for the Computer Science component of the Mathematics and Computer Science course; all the initial knowledge assumed is common to most A-Level Mathematics syllabuses. But it is a very good idea to begin reading in advance on some of the first-year topics, particularly in areas that are completely or largely new to you. The core first-year course most likely to fall in this category is Functional Programming.

A strongly suggested book for Functional Programming is:

Programming in Haskell, by Graham Hutton, Cambridge University Press, 2007.

If you have access to this book then read the first six chapters, and if possible get some hands-on experience of writing Haskell programs. There are lots of Haskell resources on the website <http://haskell.org/>. An *alternative to Hutton’s book* that you can read online is <http://learnyouahaskell.com/>. This is an excellent resource that is especially approachable by beginners.

Joe Pitt-Francis, Tutor in Computer Science, July 2024