

TALLIS 16+

THOMAS TALLIS SCHOOL POST 16 CENTRE

SUPERCURRICULAR READING LIST

SUBJECT: **Computer Science**

Reading - General

OCR AS and A Level Computer Science - PM Heathcote and RSU Heathcote

But How Do It Know – J Clark Scott

Algorithms to Live By: The Computer Science of Human Decisions - Brian Christian

The Innovators: How a Group of Inventors, Hackers, Geniuses and Geeks Created the Digital Revolution - Walter Issacson

The Elements of Computing Systems: Building a Modern Computer from First Principles - Noam Nisan

Introduction to Networking: How the Internet Works - Dr. Charles R Severance

Accidental Empires - Robert X Cringely

Reading - Cybersecurity

Cybercrime Prevention: Theory and Applications - Brewer, Russell

Digital Defense: A Cybersecurity Primer - Pelton, Joseph

Automating Open Source Intelligence: Algorithms for OSINT – Robert Layton

Reading - Artificial Intelligence

Artificial Intelligence: A Guide for Thinking Humans - Mitchell, Melanie

AI: Its nature and future - Boden, Margaret A.

Road to Conscious Machines, The: The Story of AI - Wooldridge, Michael

Supremacy: AI, ChatGPT and the race that will change the world - Olson, Parmy

Websites

https://isaacomputerscience.org/topics/a_level#ocr

<https://tldr.tech/> and sign up for emailed TLDR newsletters <https://tldr.tech/newsletters>

<http://www.tnmoc.org/>

<http://www.theregister.co.uk/>

YouTube Channels

Crash Course Computing

<https://www.youtube.com/playlist?list=PL8dPuuaLjXtNIUrzyH5r6jN9uIlgZBpdo>

Computerphile

<https://www.youtube.com/user/Computerphile/playlists>

Computer Science Lessons (degree level but some helpful A level topics on there)

<https://www.youtube.com/@ComputerScienceLessons/playlists>

Crag n Dave A-Level

<https://youtube.com/playlist?list=PLCiOXwirraUBj7HtVHfNZsnwjyZQj97da&si=OBPsRbsyOXOmPolF>

Also watch See How a CPU Works video that visualises the content from “But How Do It Know”

Places to visit

Science Museum

<https://www.sciencemuseum.org.uk/see-and-do/driverless-who-is-in-control>

The Computer Museum at Cambridge

<http://www.computinghistory.org.uk/>

The National Museum of Computing at Bletchley

<https://www.tnmoc.org/plan-your-visit>