

# A Level Computer Science

## Wider Reading & Super Curricular

### Books

**OCR AS and A Level Computer Science Paperback** 12 Sep 2016

by P M Heathcote (Author), R S U Heathcote (Author)

ISBN-10: 1910523054 ISBN-13: 978-1910523056

**RRP £29.00**

**My Revision Notes OCR A level Computer Science Paperback** 25 Mar 2016

by George Rouse (Author), Sean O'Byrne (Author), Jason Pitt (Author)

ISBN-10: 1471865835 ISBN-13: 978-1471865831

**RRP £16.99**

**Algorithms to Live By: The Computer Science of Human Decisions**

by Brian Christian and Tom Griffiths

**The Soul of a New Machine**

by Tracy Kidder

**Superintelligence: Paths, Dangers, Strategies**

by Nick Bostrom

**Hackers: Heroes of the Computer Revolution**

by Steven Levy

**The Chip: How Two Americans Invented the Microchip and Launched a Revolution**

by T.R. Reid

**The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies**

by Erik Brynjolfsson and Andrew McAfee

**The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution**

by Walter Isaacson

**The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture**

by John Battelle

**Do Androids Dream of Electric Sheep?**

by Philip K. Dick

Magazines and Journals	<p>Computer - <a href="https://www.computer.org/computer-magazine/">https://www.computer.org/computer-magazine/</a></p> <p>CS4FN - <a href="http://www.cs4fn.org/lastonein/lastonein.php">http://www.cs4fn.org/lastonein/lastonein.php</a></p> <p>magPi - <a href="https://www.raspberrypi.org/magpi/">https://www.raspberrypi.org/magpi/</a></p> <p>IEEE explore (Journals Archive) - <a href="https://ieeexplore.ieee.org/Xplore/home.jsp">https://ieeexplore.ieee.org/Xplore/home.jsp</a></p>
Places of Interest to visit	<p>The National Museum of Computing - <a href="http://www.tnmoc.org/">http://www.tnmoc.org/</a></p> <p>Bletchley Park - <a href="https://bletchleypark.org.uk/">https://bletchleypark.org.uk/</a></p> <p>The National Videogame Museum - <a href="https://www.thenvm.org/">https://www.thenvm.org/</a></p>
Websites	<p>Wikibooks - <a href="https://en.wikibooks.org/wiki/A-level_Computing/AQA">https://en.wikibooks.org/wiki/A-level_Computing/AQA</a></p> <p>Bitsize - <a href="http://www.bbc.co.uk/education/subjects/zxmh34j">http://www.bbc.co.uk/education/subjects/zxmh34j</a></p> <p>Brilliant - <a href="https://brilliant.org/computer-science/computer-science/">https://brilliant.org/computer-science/computer-science/</a></p> <p>Think Like a Computer Scientist - <a href="http://www.openbookproject.net/thinkcs/python/english2e/index.html#">http://www.openbookproject.net/thinkcs/python/english2e/index.html#</a></p> <p>Learn to code for free - <a href="https://www.codecademy.com/">https://www.codecademy.com/</a></p> <p>Program Arcade Games - <a href="http://programarcadegames.com/">http://programarcadegames.com/</a></p> <p>University of Oxford – Department of Computer Science: Background Reading &amp; Activities - <a href="http://www.cs.ox.ac.uk/admissions/undergraduate/why_oxford/background_reading.html">http://www.cs.ox.ac.uk/admissions/undergraduate/why_oxford/background_reading.html</a></p> <p>University of Oxford – recommended reading list for Computer Science &amp; Philosophy - <a href="http://www.cs.ox.ac.uk/admissions/undergraduate/why_oxford/ReadingsOutlineHandout.pdf">http://www.cs.ox.ac.uk/admissions/undergraduate/why_oxford/ReadingsOutlineHandout.pdf</a></p> <p>University of Oxford – Single A-level Mathematics, Bridging the Gap - <a href="https://www.maths.ox.ac.uk/study-here/undergraduate-study/how-apply/single-level">https://www.maths.ox.ac.uk/study-here/undergraduate-study/how-apply/single-level</a></p> <p>University of Warwick – recommended reading list for Computer Science - <a href="https://warwick.ac.uk/fac/sci/dcs/admissions/undergraduate/readinglist">https://warwick.ac.uk/fac/sci/dcs/admissions/undergraduate/readinglist</a></p> <p>Imperial College London – STEM Book List: <a href="https://www.imperial.ac.uk/be-inspired/schools-outreach/secondary-schools/post-16-resources-and-events/stem-book-list/">https://www.imperial.ac.uk/be-inspired/schools-outreach/secondary-schools/post-16-resources-and-events/stem-book-list/</a></p>

Youtube Channels	Craig & Dave - <a href="https://www.youtube.com/channel/UCOHzEBLJxlrwBAHJ5S9JQg/playlists?shelf_id=10&amp;sort=dd&amp;view=50">https://www.youtube.com/channel/UCOHzEBLJxlrwBAHJ5S9JQg/playlists?shelf_id=10&amp;sort=dd&amp;view=50</a>  Computerphile - <a href="https://www.youtube.com/user/Computerphile/videos?view=0&amp;sort=dd&amp;flow=grid">https://www.youtube.com/user/Computerphile/videos?view=0&amp;sort=dd&amp;flow=grid</a>
MOOC Courses	Introduction to Computer Science - <a href="https://www.edx.org/course/introduction-computer-science-harvardx-cs50x">https://www.edx.org/course/introduction-computer-science-harvardx-cs50x</a>  Intro to Computer Science & Programming Using Python - <a href="https://www.edx.org/course/introduction-computer-science-mitx-6-00-1x-10">https://www.edx.org/course/introduction-computer-science-mitx-6-00-1x-10</a>  Future Learn - <a href="https://www.futurelearn.com/courses/categories/tech-and-coding-courses">https://www.futurelearn.com/courses/categories/tech-and-coding-courses</a> <i>Short 3-4 week courses on a range of computing topics</i>
News Articles	BBC Click - <a href="http://www.bbc.co.uk/programmes/n13xtmd5">http://www.bbc.co.uk/programmes/n13xtmd5</a>  MT News - <a href="http://news.mit.edu/topic/computers">http://news.mit.edu/topic/computers</a>  Phys.org - <a href="https://phys.org/technology-news/computer-sciences/">https://phys.org/technology-news/computer-sciences/</a>
Summer School	UNIQ - <a href="https://www.uniq.ox.ac.uk/">https://www.uniq.ox.ac.uk/</a>  Sutton Trust - <a href="https://www.suttontrust.com/our-programmes/uk-summer-schools/">https://www.suttontrust.com/our-programmes/uk-summer-schools/</a>
Pod Cast/Radio 4	Wired - <a href="http://www.wired.co.uk/series/wired-podcast">http://www.wired.co.uk/series/wired-podcast</a>  BBC Tech Tent - <a href="http://www.bbc.co.uk/programmes/p01plr2p/episodes/downloads">http://www.bbc.co.uk/programmes/p01plr2p/episodes/downloads</a>  BBC – Computing Briton - <a href="http://www.bbc.co.uk/programmes/b06bq6j1/episodes/downloads">http://www.bbc.co.uk/programmes/b06bq6j1/episodes/downloads</a>
TED Talks & videos	20 Must See TED Talks for Computer Scientists - <a href="https://youtube.com/playlist?list=PLF7032F8EB1A4F9E2">https://youtube.com/playlist?list=PLF7032F8EB1A4F9E2</a>  KA Number Systems: <a href="https://youtu.be/ku4KOFQ-bB4">https://youtu.be/ku4KOFQ-bB4</a>
Competitions	UKCT - <a href="https://ukctchallenges.org/">https://ukctchallenges.org/</a>  BEBRAS - <a href="https://www.bebras.uk/">https://www.bebras.uk/</a> OUCC - <a href="https://oucc.uk/index.php?action=content&amp;id=27">https://oucc.uk/index.php?action=content&amp;id=27</a> BIO - <a href="https://www.olympiad.org.uk/">https://www.olympiad.org.uk/</a>
Super curricular Computer Science guidance	Cambridge University: Many elements of computer science are 'hands on', and this is often an excellent way to learn. Learning new languages or extending your knowledge of those you already know can be helpful. Similarly, acquainting yourself with modern tools can be an advantage e.g. command line tools, UNIX tools, debuggers, compilers, shell scripts. You may find playing around with a Raspberry Pi or similar of value for this.