

Computer Science

Top Tips

**AIMING FOR GRADES
8 AND 9**

The skills and/or topics needed to achieve Grades 8 & 9 are . . .

Demonstrate relevant and comprehensive knowledge and understanding of fundamental concepts and principles including digital systems and societal impacts. (Paper 1)

Effectively apply fundamental concepts, principles and mathematical skills, using sustained analytical, logical and evaluative computational thinking, to a wide range of complex problems.

Develop and refine a complete solution that meets the requirements of a substantial problem. (Paper 2)

If aiming for Grades 8 & 9 you will need to particularly focus on this in your exam papers . . .

To achieve Grade 8/9 in paper 2 pupils will be asked to write programs. Being able to use Functions and pass parameters between the main program is a high level coding skill.

Using arrays to store more than one piece of data also demonstrated good programming knowledge.

Using trace tables to parse through code demonstrates the ability to read and follow code.

Mathematical conversions such as Hex, denary, binary and addition. Pupils should also be able to explain the purpose of binary shifts and complete logic circuits.

To achieve grade 8/9 in paper 1 pupils should be able to discuss the social, cultural and environmental impact computing has had. Pupils should be able to discuss new technologies and the future of computing in areas such as AI. This will demonstrate a sound and broader understanding of the subject and enable higher marks to be achieved in essay questions. Pupils should also demonstrate sound understanding of computer architecture, explaining the purpose of each register and unit.

You can find resources to support your preparation at . . .

Smart Revise Craig and Dave Seneca Learning Physics and Maths Tutor
CGP Revision Guide OCR Computer science course book

When completing independent revision you should . . .

Use the revision mat templates, populate each section with your own notes, don't just copy and paste this will not help you remember content.

Attempt to answer exam style questions on the topic you have covered. Smart revise have a feature in which you can self mark once you have answered the question. It will indicate what you should have written to gain marks based on the mark scheme.

Grade boundary for a Grade 8 in 2019

77%

Grade boundary for a Grade 9 in 2019

85%

Top tips for aiming for Grades 8 & 9

Use subject specific terminology in your essays.

Discuss questions requiring comparison need to be balanced. e.g. If you make two positive points you need to also give two negative. This is a requirement for top mark band.

When drawing networks, logic gates , flowcharts you must indicate the flow direction of data/current.