

COMPUTER SCIENCE

Specification J276

Course overview:

This specification/qualification will enable learners to develop valuable thinking and programming skills that are extremely attractive in the modern workplace. You will develop a deep understanding of computational thinking and how to apply it through a chosen programming language.

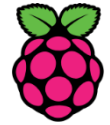
OCR's GCSE (9–1) in Computer Science will encourage you to:

- Understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- Think creatively, innovatively, analytically, logically and critically
- Understand the components that make up digital systems, and how they communicate with one another and with other systems
- Understand the impacts of digital technology to the individual and to wider society

How is the course structured?

Unit	Assessment	Content overview
1	40% of total GCSE Computer systems (01) 80 marks 1 hour and 30 minutes Written paper (no calculators)	Computer systems Systems Architecture, Memory, Storage, Wired and wireless networks, Network topologies, protocols and layers, System security, System software, Ethical, legal, cultural and environmental concerns
2	40% of total GCSE Computational thinking, algorithms and programming (02) 80 marks 1 hour and 30 minutes Written paper (no calculators)	Computational thinking, algorithms and programming Algorithms, Programming techniques, Producing robust programs, Computational logic, Translators and facilities of languages, Data representation
3	20% of total GCSE Programming project (03/04) 40 marks Totalling 20 hours Non-Exam Assessment (NEA)	Programming project Programming techniques, Analysis, Design, Development, Testing and evaluation and conclusions

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while answer!="yes"  
    answer=input("Are you choosing Computer Science?")  
endwhile
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RaspberryPi



Computer Science Is...

Ai ♦ Algorithms ♦
Biocomputing ♦ Chip Design ♦
Communications ♦ Cloud
Computing ♦ Cognitive
Science
♦ Forensics ♦ Cybercrime ♦
Database Engineering ♦ E-
Commerce
♦ Encryption ♦
Evolutionary Computing ♦
Genetic Algorithms ♦
Graphics ♦ Game Design ♦
♦ Hardware Design ♦
Informatics Information
Systems ♦ Language Design ♦
Logic ♦ Natural Language
Processing ♦ Networking ♦
Neural Networks ♦ Operating
Systems Optimisation ♦ Real-
time Processing ♦ Vision
Processing ♦ Visualisation ♦
Web Engineering

...among other things