

COMPUTER SCIENCE

QUALIFICATION	GCSE
EXAMINING BOARD	AQA
CONTACT TEACHER	Mr Doran
LESSONS PER FORTNIGHT	5

What you will learn?		
Component 1	Component 2	Component 3
Computational Thinking: <ul style="list-style-type: none"> · Problem solving · Abstraction · Decomposition · Algorithms · Pseudocode · Code Tracing 	Theory: <ul style="list-style-type: none"> · Networks · Data representation · Hardware · Ethics · Software · Cyber Security 	Programming: <ul style="list-style-type: none"> · Planning · Testing · Evaluating · Programming Techniques · Arrays · Subroutines · User Interfaces

Assessment			
Overview			
Theory	Paper 1	50%	End of Year 11
	Paper 2	50%	End of Year 11

Paper 1:

- Few multiple choice or single word answer questions.
- Many short written questions focusing on the analysis and interpretation of algorithms.
- Few extended written questions requiring detailed explanation or discussion.

Paper 2:

- Few multiple choice questions.
- Many short written questions focusing on the description or explanation of computer science theory.
- Few extended written questions requiring detailed explanation or discussion.

Course Overview
<ul style="list-style-type: none"> • Examine the roles of computer hardware and software and how they function. • Find out how files are actually stored and how data is represented. • Investigate the legal and ethical issues in computing. For example, should Google be allowed to track the location of android users? • Explore a range of cyber security threats and the potential solutions. • Develop high level programming skills using Python. • Plan and test programs. • Evaluate the efficiency of programs. • Consider a range of network topologies and how they actually send and receive data.

Careers
<ul style="list-style-type: none"> • A-Level Computer Science • Software Engineering Apprenticeships • Computer Science Degree • Software Engineer • Cyber Security Analyst • App Developer

What students say?

Positives:
"It's challenging, but rewarding when you can get a program to work"

Be aware of:
"There is no creative design work like website design, graphics or animation"

Qualities needed to do well:
"Problem solving is important, and you have to be good with numbers"

