

The Stonehenge School- GCSE Computer Science



WHAT IS THE COURSE ABOUT?

It is a fantastic course that allows students to broaden their knowledge of how computers function. If you are interested in learning about how to make computers do what YOU want and would like to know what actually happens INSIDE THE MACHINE, then this is the course for you!

Not only will you learn to code in a programming language (Python), you will also learn about what makes computers work and key problem solving skills that can be applied across a variety of different situations that you will face in life.

Exam Board	Pearson Edexcel
Course Name	Computer Science
Type	GCSE Graded 9-1
Assessment	100% EXAM (2 Exam Papers)
Lesson	5 x 1hr lessons a fortnight
Teachers	4 subject specialists in department
Homework	E-Learning & Knowledge Organisers
Trips	Bletchley Park / Royal Signals



TOPIC 5: COMPUTATIONAL THINKING

We look at what algorithms are, what they are used for and how they work. We learn how to follow, amend and write algorithms plus construct truth tables.



YEAR 11

TOPIC 4: NETWORKS

We will take a look at understanding computer networks and network security.



TOPIC 3: DATA

We will explore binary, data representation and data storage and compression.



TOPIC 2: COMPUTERS

We will learn about the hardware and software components of computer systems and characteristics of programming languages.



TOPIC 6: PROBLEM SOLVING WITH PYTHON

We look at for a large part of the year:

- to understand what algorithms are, what they are used for and how they work in relation to creating programs in Python
- to understand how to decompose and analyse problems
- to be able to read, write, refine and evaluate Python programs.

"We prepare our pupils for our GCSE Computer Science course by building on what they have learnt in Year 9 Computer Science"



AM I SUITABLE?

- ✓ Do you like solving problems?
- ✓ Can you think logically?
- ✓ Is your Maths pretty good?
- ✓ Are you willing to learn new concepts and push yourself?

COURSE REQUIREMENTS?

On occasions you will work after normal school hours or during lunch times to complete revision or programming tasks

YEAR 10

TOPIC 1: ISSUES AND IMPACT

What are the emerging trends in computing technologies? What is the impact of computing on individuals, society and the environment? What are the ethical, legal and ownership issues?



BLETCHLEY PARK



START HERE