Computer Science Option

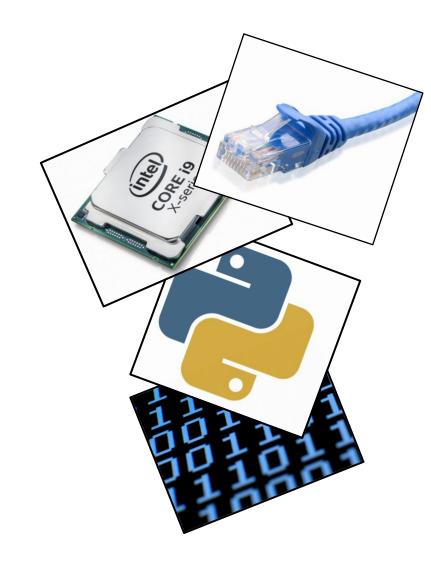
you can choose!



Why GCSE Computer Science?



Click to play video



GCSE Computer Science

What will I learn?

Unit 1 - Computer systems

(how computers work and how they are used by society)

- Systems Architecture
- Memory
- Storage
- Wired and wireless networks
- Network topologies, protocols and layers
- System security
- System software
- Ethical, legal, cultural and environmental concerns

Unit 2 - Computational thinking, algorithms and programming (code using python and making programs)

- Algorithms
- Programming techniques
- Producing robust programs
- Computational logic
- Translators and facilities of languages
- Data representation Computational thinking, algorithms and programming

Assessment Style

Written Exam Paper

1 hour and 30 minutes

80 marks

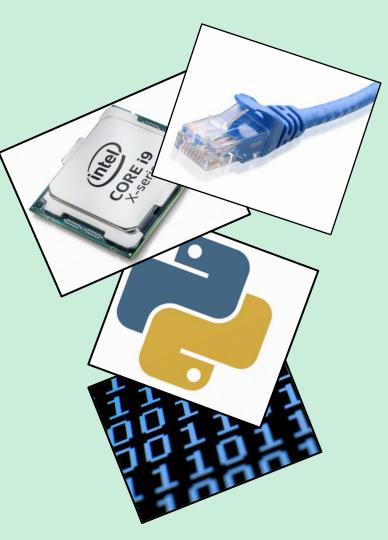
(no calculators allowed)
50% of GCSE

Written Exam Paper

1 hour and 30 minutes

80 marks

(no calculators allowed) 50% of GCSE



Careers

GCSE Computer Science

Where can Computer Science take you?

System/hardware Engineer

Data Analysist

Teacher

Software Developer

Careers in Computer Science:

- System/hardware Engineer
- Data Analysist
- Software Developer
- Teacher
- Computer Programmer
- Network Administrator
- IT Technician
- Computer Games Designer
- Web developer

- Higher Education/University Courses:
- Computing
- Computer Science
- Computer Games Design
- Creating Digital Graphics
- Games Programming

Post sixteen courses at SWB:

- A level Computer Science
- BTEC level 3 Information Technology



GCSE Computer Science

Programming software and looking at how it works

- 100% exam all done at the end
- Only 1 attempt at the exam
- LOTS of Python programming
- Helps if you are good at maths



Do I get to create games?

- Yes!
- In computer science you will gain the opportunity to create simple games in Python such as a guessing game.

Do I get to build a computer?

- You do not get the opportunity to build a computer in school.
- You get the opportunity to build a virtual computer using some building mats.
- Get to physically look at computer parts and learn how they work.
- Learn the skills in lessons on how to build a computer yourself.

• Do I need ICT or Computer Science?

- Computer Science teaches you logic and problem solving.
- It gives you the skills that can be used throughout life in fixing problems within computers.
- This GCSE is useful if you want a career in computers such as games design, programming or IT technician.
- Develops skills in maintaining networks, protecting them through white hat hacking to develop cyber-security.

Are there any trips?

- You will get the opportunity to go on a trip to Disneyland Paris to a Computing Live Event
- You get real work experience in coding robotics, augmented and virtual reality for the Disney Parks
- Get involved with the applications used to design rides at Disney Parks
- Look into the technology used in current and future theme park rides
- Get to go on the rides and enjoy Disneyland
- Get the chance to explore Paris and do some sightseeing!