

# Computer Science Option

you can choose!



# Why GCSE Computer Science?



*Click to play video*



# OCR 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

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# GCSE Computer Science

## Where can Computer Science take you?

Careers in Computer Science:	Higher Education/University Courses:	Post sixteen courses at SWB:
<ul style="list-style-type: none"><li>• System/hardware Engineer</li><li>• Data Analystist</li><li>• Software Developer</li><li>• Teacher</li> <li>• Computer Programmer</li><li>• Network Administrator</li><li>• IT Technician</li><li>• Computer Games Designer</li><li>• Web developer</li></ul>	<ul style="list-style-type: none"><li>• Computing</li><li>• Computer Science</li><li>• Computer Games Design</li><li>• Creating Digital Graphics</li><li>• Games Programming</li></ul>	<ul style="list-style-type: none"><li>• A level Computer Science</li><li>• BTEC level 3 Information Technology</li></ul>



# 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



# Computer Science FAQs

- Do I get to create games?

## Computer Science

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

# Computer Science FAQs

- Do I get to build a computer?

## Computer Science

- 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.

# Computer Science FAQs

- Do I need ICT or Computer Science?

## 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.