

Why take GCSE (9-1) COMPUTER SCIENCE?

Computer Science is a very practical subject –use the knowledge and skills you learn in the classroom to solve real-world problems.

By studying the course you will obtain:

1. Valuable thinking and programming skills that are extremely attractive in the modern workplace.
2. A deep understanding of problem solving and experience in creating logical and efficient solutions.
3. The ability to write down solutions to problems for other people to understand.



Most Tretherras A Level Computer Science students create their own games on platforms such as Unity.

The course at a glance

COMPUTER SYSTEMS

COMPONENT 1

- Study how processors work.
- Investigate computer memory and storage.
- Explore modern network layouts and how they function.
- Build skills in the ever important realm of cyber security.
- Investigate how types of software are used within computer systems.
- Stretch wider comprehension of how computers and computing affect ethical, legal, cultural and environmental issues.

COMPUTATIONAL THINKING, ALGORITHMS AND PROGRAMMING

COMPONENT 2

- Study fundamental algorithms in computer science.
- Build a firm foundation in programming techniques.
- Produce programs through diagrams.
- Thoroughly test programs and make them resistant to misuse.
- Explore Boolean algebra (AND, OR, NOT).
- Understand how we store data within computers in binary form.

A PROGRAMMING PROJECT

- Use new-found programming skills on an independent coding project by solving a real-world problem.
- Students will spend 20 classroom hours engaging with the Programming Project.



If you have enjoyed Python Programming in Year 9, you will likely enjoy Computer Science.