THE MAYNARD SCHOOL

COMPUTER SCIENCE

AWARDING BODY: OCR
SPECIFICATION: J276

Computer Science is a very practical subject – students will be able to use the knowledge and skills they learn in the classroom on real-world problems. It's also a highly creative subject that calls on learners to be inventive. To help us develop this engaging, modern qualification, we talked to companies like Microsoft, Google and Cisco; organisations like Computing At School (CAS) and also teachers and academics.

Computer Systems Component

- 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

- 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 Programing Project.