Entry Requirements:

Be on the All-Star pathway or to have spoken directly with Mr Mullan.

Why should I take this course?

Computer Science is a very practical subject, students will be able to use the knowledge and skills they learn in the classroom on real life problems. The world is evolving with IT and Computer Science at its core.

On the course you will gain valuable thinking and programming skills that are extremely attractive in the modern workplace. These skills will link across many other subjects in school. You will gain a deep understanding of problem-solving and experience in creating logical and efficient solutions as well as the ability to write down solutions and problems for other people to understand. The course will gain you a good grounding in mainstream computing theory and understanding.

This subject teaches you to think, to be inventive and to be part of a developing, engaging and dynamic future for the world.

Course Structure:

Component One: Computer systems

Study how processors work.

System architecture

Memory and storage

Computer networks connections and protocols

Network security

System software

Ethical legal cultural and environmental impacts of digital technology

Component Two: Computational thinking, algorithm and programming

Algorithms

Programming fundamentals

Producing robust programs

Boolean logic

Programming languages and integrated Development Environments

How will I be assessed?

There will be two paper-based exams 1.5 hours long.

What careers might this course lead to?

Computer Scientist, Software Architect, Hardware Architect, Network Designer and Engineer, Working in multimedia design, working with range of software tools and packages and being a Software Developer or Engineer, Computer aided engineering, Computer aided design, Computer Programmer, Electrical engineer, Teacher, University Lecturer, Research Fellow, IT analyst programmer, Web Developer, Astronaut using computer science instruments, Computer Games Developer or Tester, IT Security Analyst, IT Security, Systems Analyst or developing Medical Equipment for new Robotic Operations.

There are a host of possible futures where a GCSE in Computer Science can benefit you immensely