Computer Science is a subject in much demand and with clear relevance to modern day life. Cybersecurity, networking, app creation, systems design are all examples of key employment areas with a massive shortfall of suitably qualified employees.

It has become an ever-growing part of human life, where computer systems are embedded in everyday devices, whether it be for our home, work, learning or entertainment environments. It is a subject that students will naturally engage with, where invention and resourcefulness are encouraged and students are expected to apply the academic principles they have learnt to the understanding of real-world systems.

In a competitive market, sound Computing and ICT skills are much sought after and provide students with the skill set that will enable them to work in a vast number of areas.

At Kingsbury High School, the Computer Science department aims to develop computer scientists through equipping students with the skills to participate in a rapidly-changing world. The curriculum journey incorporates challenging and engaging topics, giving students the opportunity to develop their capability, creativity and subject knowledge regardless of their socio-economic background, ability or learning needs.

We cover the three strands within Computer Science: Digital Literacy, Computer Science and Information Technology.

The curriculum is developed so that students are taught the principles of problem solving and computation, through the development of knowledge, skills and understanding and learning to think rationally and logically through key computational concepts and experience.

Students will develop understanding for all the technology that surrounds them by not just understanding how computer systems work, but how to put this knowledge to use through programming and problem solving.

Students will also be equipped to use information technology to create programs, systems and a range of content whilst also developing programming skills.

Students will also devise creative solutions by designing, writing, testing and evaluating programs.

Our curriculum will also ensure that students become digitally literate and are able to use, express themselves and develop their ideas through information technology, which will help prepare them for the future workplace and be active participants in a digital world.

The curriculum will provide a focus on developing resilient learners who are able to recover from mistakes and effectively solve problems. Our curriculum has also been designed to ensure our students have sufficient knowledge to stay safe online, are aware of the dangers of technology so that they can use computers safely and responsibly.

**Choose this subject if...**

• You like to explore the theoretical side of Computing.

• You can use programming skills to find solutions.

• You have good mathematical skills to solve problems.

**Future career / further education options...**

This course will provide excellent progression to A-Level Computer Science and on to a degree level course in the areas of computing, engineering and science. It will also provide a sound preparatory basis for studying industry standard IT qualifications as well as providing the knowledge, skills and understanding that a growing number of employers are demanding.