



# COMPUTER SCIENCE A-LEVEL

## WHY SHOULD I STUDY A LEVEL COMPUTER SCIENCE?

Computer Science is a fantastic subject to study as the most important aspect of this subject is problem solving, which is an essential life skill. Computer Scientists are needed in the digital age we find ourselves in to design, develop and apply software and hardware. In addition to this it provides excellent job opportunities as every industry uses computers, meaning computer scientists can pursue any sector they want.

## WHAT WILL I LEARN ABOUT?

Computer Science is a practical subject where pupils can apply the principles learned in the classroom to real-world systems. Computer Science is divided into 2 sections, theory and practical. Computer systems gives you a knowledge of how computers and other digital devices operate. It introduces you to the internal workings of the central processing unit (CPU), networking and types of software. The practical aspect covers problem solving and pupils will be expected to identify a problem then analyse, design, develop and test a proposed solution, which will be written in Java. This is a very hands on subject and pupils enjoy the coding aspect of the course.

## HOW WILL I BE ASSESSED?

The A-level has 2 exams covering computer systems and algorithms and programming. Each exam counts 40% of the grade. The final 20% is achieved by completing a programming project in object-oriented programming.

## WHAT SKILLS WILL I DEVELOP?

Computer programming and coding teaches you perseverance, resilience, and problem solving and logical thinking, all of which are valuable life skills for any future career. Another benefit of this subject is it teaches you to listen to other team members and take on board other's opinions and ideas.

## WHERE COULD THIS SUBJECT TAKE ME IN THE FUTURE?

Taking Computer Science opens many doors for the future. Having a computing degree will provide you with the knowledge, problem-solving skills and logical thinking capabilities that serve as a competitive advantage in your career. There is a wide number of IT related careers including systems analysts and web designers and 76% of Computer Science graduates go directly into employment.

**Exam Board:** OCR

