

# COMPUTER SCIENCE AT SSFC

## **Why study Computer Science?**

Computer Science is an exciting, innovative and challenging course. Students develop logical thinking and problem-solving skills, enabling them to develop efficient algorithm designs.

In Computer Science students will enjoy a practical element which will allow them to build system using programming languages such as VB.NET, JavaScript and HTML. The theoretical side looks at how the internal components of a computer work, how they store and transfer data, and how they affect the world around us.

### **Course Overview**

Unit 1: Computer Systems (Exam)

Topics included: Hardware, Types of Software, Types of programming Language, Encryption, Databases, SQL, Networks, Web Technologies, Data Storage, Legal, Moral and Ethical Issues.

Unit 2: Algorithms and Programming (Exam)

Topics included: Computational Thinking, Algorithm Design, Programming VB.NET and JavaScript.

Unit 3: Programming Project (Coursework)

Students identify a real-life customer with a problem to solve, and analyse their requirements before designing, building and evaluating a solution using VB.NET or another language.

#### **Careers**

Access a career path including Cyber-Security, Manufacturing, Defence, Retail, Medicine, Marketing, Law, Healthcare, Gaming, Banking, Finance, Tourism, Film, Advertising, Government, Environment amongst many more.

## What subjects go well with Computer Science?

Here at SSFC you have the opportunity to study a combination of three subjects. We recommend taking Maths and Physics. Many students do however take a range of subjects such as Media, I.T., Biology, Business and Economics as well.

## **Entry requirements**

As Computer Science is a Maths based subject, we require you to have a grade 6 or above in Maths. Previous Computers Science experience is desired but not essential.



