

# Bishop Stopford School

faith | justice | responsibility | truth | compassion

## The Expressive Arts, Design and Technologies Faculty



### Statement of Intent

The Computing department at Bishop Stopford School aims to equip students with the skills to participate in a rapidly-changing world through challenging and engaging topics. Students will develop an understanding and application in the fundamental principles of computer science by having the opportunity to write programs, design webpages and produce professional digital products.

Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

The national curriculum for Computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.
- In Computer Science we are dedicated to ensuring our students leave with the skills to fully embrace a future of rapidly advancing computer technology.

The Expressive Arts Design and Technologies Faculty is, quite simply, a great team of forward thinking, professional and dedicated people.

We are a diverse group, ranging from teachers with over twenty years' experience to NQTs just making their way into the profession. As an Expressive Arts and Technologies Faculty we benefit from sharing the expertise in Drama, Music, Art, Design and Technology and Computer Science and i-Media! We working collaboratively and regularly share resources and outstanding practice. But what binds us together is a strong commitment to the students and each other, in addition to the real passion for the subjects which we teach. Whether it's Beethoven, Picasso, STEM, or the Graphics or Computer programming that get you going, it really doesn't matter. If you love learning, enjoy working with young, inquisitive, hard-working students and are seeking to thrive alongside committed and supportive colleagues, then this is the place for you.

We are part of the Computing at Schools community which enables us to provide support to Computing teachers within the area. We are therefore able to offer training and guidance in Computer Science teaching and learning as well as maintain a strong relationship with secondary schools in the area. This enables us to share resources, ideas and equipment. Computer Science is a subject that is forever evolving with the growth of technology and as a School we ensure that we are ahead of this by working on effective and current resources for students.

Career development for staff new to the Faculty is excellent. Colleagues who have shown aptitude and passion have been quickly promoted to posts as wide-ranging as Head of Faculty, Head of Subject, STEM coordinator and pastoral and wellbeing coordinator. We never stop learning or sharing ideas and resources, as a teamwork is integral to the success of our faculty.

Computer Science and iMedia is becoming a popular subject for GCSE at Bishop Stopford School with numbers increasing each year. For both subjects, students follow the OCR specification for J277 and J817. We have many resources available to students to complement their learning, such as Cameras, Adobe Suite, iPads, Raspberry Pi machines, Micro Bits and more. We have also seen an increase in girls taking Computer Science as an option for GCSE and more girls attending our coding club activities.

Computer Science is also offered as an option for A-level through OCR (H446). The number of students that choose A-level computer science is also increasing each year with more students choosing to take a career path into Computing. We also offer many different resources for students and teachers at A-level as well as offering students opportunities to explore different paths into the Computing industry such as hardware, software engineering, cyber security etc.

As a recent development at Key Stage 3, the students are taught in a 'carousel' 8 week block within the Design and Technology option. Our KS3 curriculum covers the three main strands of Computer Science; computer Science, Digital literacy and Information technology. Our schemes of work at KS3 have been designed to allow students to follow a passion for computer science in many different areas. They are able to gain skills in programming as well as using different types of software. The curriculum is also designed to provide them with the IT skills needed in other subjects and for any future career.

At Bishop Stopford School we ensure that students have the opportunity to fulfil extracurricular activities and within the Computing department we run Coding Clubs for students every week. Students that attend coding club enjoy being able to mix with students across year groups and share programming best practice. We also run initiatives which are supported by outside agencies such as Cyber discovery, Matrix challenge, Bebra challenge, Cyber First for Girls and various different Raspberry Pi incentives. Being a part of these incentives has allowed students to gain links with outside agencies and explore different avenues of Computing. Computer students at Bishop Stopford School, were invited to Oxford University for a tour of their Computing Facilities as a result of them taking part in the Bebra challenge, which was an amazing experience for students. We have two main computer teaching rooms which are equipped with the regularly maintained machines and the equipment needed to teach effective Computer Science lessons.

Mrs Antonina Fletton

## Head of Expressive Arts, Design and Technologies

### **Vital Statistics**

#### **Faculty Members**

7 full time (including a Head of Drama, Head of Art, Head of Music, Head of Design and Technology and Head of Computer Science) and 7 part time; one full time Expressive Arts/ Art technician, one full time Food and DT technician and a part time curriculum assistant.

#### **Facilities**

5 Faculty staff work areas. iPads and 2 Computing Suites. The school library is in close proximity and is an excellent resource.

#### **GCSE Computer Science and Cambridge Nations in iMedia**

Two groups follow the OCR Specification (J276) and one group for iMedia (J817)

#### **A-Level**

One group follow the OCR Sepcification (H446)

#### **Enrichment**

- Coding Club
- Computing Society
- Various outside agency initiatives
- Blenchley park visit at KS4