

## Curriculum Statement – Computing Department

### Intent

To enable our students to be prepared for the future, we have to ensure they have the digital skills necessary to adapt to our ever-changing technological world. Students will need to be independent and resilient problem solvers who can also work as part of a team, preparing them for a future, as yet unknown. Our students will need to create new ways to solve old problems whilst enabling their own curiosity and creativity to flourish. We will provide key skills in software and hardware to enable students to be top programmers and creative designers. We want our students to become innovative digital learners and to be able to express themselves and develop their ideas through information and communication technology. Our students will need to work to a level suitable for the future workplace in order to become active participants in a digital world.

### Implementation KS3

- Students study 6-week interleaved modules of practical and theoretical skills throughout key stage 3.
- Students implement with a clear engagement on theoretical and practical skills.
- Teacher modelling is used to show both skills and end-products.
- Students learn new digital skills and implement them in creative expression in a project and workbook-based curriculum.
- Teachers encourage students to experiment with a variety of software in a risk-free learning environment.
- e safety is an essential part of our curriculum: understanding a range of ways to use technology safely, respectfully, responsibly and securely. Including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.
- Awareness of the legal aspects of the use of digital images and web-based material is ever present in the curriculum.
- Students are encouraged to explore and research new and emerging technologies and be aware of Computing and ICT in the news.
- Formative Digital and verbal feedback runs throughout the lessons.
- Summative assessment takes place at end of each module.
- Lessons begin with a recap on previous learning.
- Appropriate homework is set to reinforce learning.
- Students utilise office 365 throughout their school careers, enabling them to have full access to digital services in school and at home.

### Impact

- At the end of key stage 3 students will be digitally literate.
- This foundation of skills underpins the curriculum choices available at Key Stage 4.
- Increasingly, students have digital skill levels which correlate with their chronological age.
- Students are competent and confident to stay safe online.

### **Implementation KS4**

- Students choose a pathway of Computer Science or Creative i media.
- Aspects of computing and Creative i media are applied at greater depth in order to progress to higher levels of study and or a professional career.
- All students will develop and apply their capability, creativity and knowledge in computer Science, digital Media and Information Technology.
- Following on from Key stage 3, students further develop skills in:
  - analysis and problem solving.
  - design.
  - computational thinking skills.
- The key stage 4 curriculum implements the application of these developing skills in practical settings.
- On-line safety education remains an on-going priority to ensure validity and relevance to on-going developments in technology.

### **Impact**

- Increasingly students have digital skill levels which correlate with their chronological age.
- Students are competent and confident to stay safe online.
- GCSE computer Science and Cambridge National Creative i media outcomes provide progression opportunities to continue into further and higher-level academic courses.
- Outcomes prepare students for relevant workplace opportunities in a rapidly expanding employment sector.