Y9 Computing



IT AT YARDLEYS

INTENT: Through our ambitious computing curriculum our learners will have access to a broad and balanced range of topics including: digital literacy, computational thinking and modern technology. Yardley's computing curriculum will provide students with an understanding of how computing underpins today's modern lifestyle and has made the world better, faster and more connected. We ensure that the students at Yardleys can develop to become masters and creators in this field, to aid them in their development of our rapidly changing technological world.

Y9 IT AT YARDLEYS

In Year 9 students will further enhance their ability to programme through the use of new programming software. They will spend time developing and understanding and the application of different algorithms.

| Year 9 | | | |
|---|--|--|---|
| | Introduction to Python | Media Animations | Representations |
| | Python Sequences | Data Science | Cyber security |
| SUBSTANTIVE KNOWLEDGE | Awareness of syntax errors | Media | Images – pixels |
| | Block based programming language | 3D animations | Resolution |
| | Decomposition | Shape | Colour depth |
| | Variables | Proportions | Sample rate & size |
| | Sequencing and selection | Symmetry | Legislation |
| | | Data sets | DOS attack |
| | | | Authentication |
| | | | Networks |
| DISCIPLINARY KNOWLEDGE (primary focus in capitals) | Use of Programming language | Use blender - deleting and adding objects; moving, | Calculate size of image |
| | Use simple arithmetic expressions in | rotating, scaling, and colouring | Image editing techniques |
| | assignment statements to calculate | Identify patterns and trends | Understand implication of cyber attacks |
| | values | | |
| | Sequencing and selection | | |
| | Understanding of Integers Role of Iteration | | |

We aim to provide students with a curriculum that educates the whole child, creating responsible and respectful citizens. Through the development of substantive and disciplinary knowledge students are given the tools that allow them to achieve excellence and be ready for life.