

JOHN TAYLOR HIGH SCHOOL



OVERVIEW OF THE COMPUTER SCIENCE DEPARTMENT



Computer Science is a highly regarded and successful department. Our intent is to ensure that every student is a 21st century creator and problem solver, with the skills and knowledge needed, the experience to spot patterns and make links between topics, whilst also developing the confidence and resilience to learn from mistakes. In addition, we aim to cover the basic IT skills that are needed for students to be able to safely access online learning in other subjects.

Key Stage 3

All students at Key Stage 3 have one 100 minute lesson per fortnight of Computer Science. Topics covered include programming (using Flowol, Scratch, Small Basic and then Python), computer hardware, data representation, algorithms and logic, databases, data modelling, cryptography, web development and e-safety. We cover the Computing National Curriculum whilst also ensuring that students are aware of safety issues and are prepared for GCSE study.

Key Stage 4

Students at Key Stage 4 can opt to study GCSE Computer Science (OCR). This is extremely successful; in 2019, 48.7% of students achieved a grade 7 or above (compared to 21.6% nationally), with 23.1% of students achieving a grade 9 (compared to 4.1% nationally). Uptake is very good, with three classes in Year 10 and three classes in Year 11.

Post-16

We offer both A Level Computer Science (OCR) and BTEC IT (National Extended Certificate) to Post-16 students. A Level Computer Science in particular is very successful, achieving excellent results; in 2019, we achieved a Value Added score of +0.5, placing us as one of the top performing departments in the school. Uptake is also very good, with 27 students in Year 13 and 23 students in Year 12.

Note – 2019 results are referred to as the last set of externally validated examination results.

The Department

The team currently includes:

Gavin Craddock – Curriculum Area Leader for Computer Science
Paul Thompson – Teacher of Computer Science / Head of Year 11
Lynn Bostock – Teacher of Computer Science
Tom Burton – Teacher of Science and Computer Science
Alistair Duncan – Senior Network Technician
Jaxon Howell – Junior Network Technician

Facilities and Resources

The department has use of three dedicated IT suites, each with 30 PCs running Microsoft Windows, with two other full suites available if needed. We make use of Python at Key Stage 3, GCSE and A Level but also use Visual Studio (C#, VB), JavaScript and PHP (using a local IIS web server) at A Level. All resources are shared with teachers and students using Microsoft Teams. We are at the forefront in school of using Sharepoint, Forms, Class Notebook and Teams Assignments.