



St Mary's Catholic School

Computer Science and ICT Department

The Computer Science and ICT department occupies 2 rooms on the first floor of the south wing of our new building. The classrooms are bright and airy, and are equipped with excellent quality modern furniture, 30 desktop PC's and a Smartboard with accompanying high quality sound systems. These resources enable staff to prepare exciting presentations and other sources to demonstrate skills and techniques to students, in addition to delivering their own original materials in an engaging and stimulating manner.

There are currently 2 full time specialist Computer Science/ICT teachers in the department, including the Head of Department. There are also 2 other full time experienced members of staff from the Business Studies department who successfully contribute to ICT, ensuring that there is strong cohesion in the teaching staff.



ICT
Department



Other departments have access to trollies of net-books in each wing of the school, or, as in the case of Business Studies, Health and Social Care and D&T, have IT equipment permanently set up in their teaching areas. All teaching areas of the school are fitted with a Smartboard and speakers, and there is wireless connectivity throughout the school.

Key Stage 3

All students in Years 7 and 8 have discrete Computing lessons which are based on the new National Curriculum for Computing. Students undertake a range of projects which develop their digital literacy and skill with computer software such as MS Office programs as well as providing an introduction to the fundamental concepts of Computer Science. In Year 9 students may elect to study Computing in further detail. We also run 'Python Club' on Friday lunchtimes where students in Years 7-9 can learn more about programming.

Key Stage 4

ICT and Computing courses are very popular choices for students at Key Stage 4. The school offers two GCSE options at KS4 for students who wish to study either Computer Science or ICT. The AQA Computer Science course leans heavily on learning how to program, with Python being our language of choice. The course consists of two practical programming controlled assessment tasks and a theory examined unit. The Edexcel ICT course consists of practical controlled assessment work based around spreadsheets, databases and presenting information, as well as a theory examined unit which focuses on a broad range of topics with the aim of encouraging students to be skilled users of modern technology.

Key Stage 5

In the Sixth Form we offer 2 courses. Year 12 students may choose to study the new AQA A-Level Computer Science course. This course is suitable for students who have studied Computer Science at GCSE level and will allow them to extend their programming skills and understanding of the underlying concepts. We also offer the BTEC Nationals Subsidiary Diploma in IT in Years 12 and 13. Students take 6 units across the two years in areas such as Graphics, Website Design and Database Design, as well as the theory based units on Computer Systems and Working in the IT Industry.

There are comprehensive schemes of work with accompanying teaching resources for all key stages. Students are encouraged to develop their skills, knowledge and understanding of ICT and Computing using varied approaches to learning.

We have developed close links with industry and many fantastic extra-curricular opportunities are available to students. These include CodeWars, a programming competition run by Hewlett Packard Enterprise and work experience programmes with companies such as Accenture.