St Mary's Catholic School

Computing Department

The Computing 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 PCs 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 is currently one full time and one part time specialist Computing teachers in the department, including the Head of Department. There are also other full time experienced members of staff from the Mathematics and Business Studies departments who successfully contribute to Computing, ensuring that there is strong cohesion in the teaching staff.

Computing 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
In Year 9 students may elect to study Computer Science or ICT as an option subject. We also run 'Python Club' on Friday lunchtimes where students in Years 7-8 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 options at KS4 for students who wish to study either Computer Science or ICT. For Computer Science we offer the AQA GCSE course. The course consists of a practical programming project and two theory examined units. We also offer CiDA (Cerificate in Digital Applications) as our ICT option, a practical course where students learn the fundamentals of web design and creative multimedia. Results at KS4 have been excellent in recent years with highlights including:
- GCSE Computer Science averages 78% A*-C over the past 3 years, significantly above the national average
- GCSE ICT averages 72% A*-C over the last 3 years, significantly above the national average
- 92% of BTEC Level 2 IT pupils achieved at least a Level 2 Pass in 2017 compared to the national figure of 72%

Key Stage 5
In the Sixth Form we offer two courses. Students may choose to study AQA A-Level Computer Science. 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 Extended Certificate in IT. Students take 4 units across the two years and are assessed via a mix of coursework and exams. Again results have been excellent with highlights including:
- A Level Computer Science achieved 50% A* or A grades and 100% A*-C in 2017
- 94% of BTEC Level 3 IT students achieved a Distinction or better in 2017

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 competing in competitions such as the First Lego League and CodeWars, a programming competition run by Hewlett Packard Enterprise, which we have won in 2016 and 2017. We also organise work experience for Sixth Form students with Accenture through the Industrial Cadets programme.