Information Communication Technology

The ICT department, strive to create an environment where good teaching and quality learning reside. The enthusiasm and subject knowledge of staff empowers students to take responsibility for their own learning. We believe that ICT skills are essential to the development of a student in this technological age.

Hylands is fortunate enough to be equipped with two dedicated ICT suites which run industry-standard software including Microsoft Office 2016 and the Adobe Creative Suite.

Key Stage 3 – Computer Science

Our bespoke KS3 curriculum introduces students to an array of emerging technologies and key concepts of Computer Science. Students will work independently and collaboratively on small projects introducing the fundamentals of problem solving, programming, pseudo code, flow diagrams, using software for business purposes in addition to raising the awareness of online safety, cyber-bullying and up to date legislations. The Key Stage 3 curriculum aims to prepare our students for Information Technology courses that we offer at Key Stage 4 and 5.

Inspire ★ Challenge ★ Achieve

Key Stage 4

At Key Stage 4 we have offered both OCR Level 2 Cambridge Technical Certificate in IT and GCSE Computer Science.

OCR Level 2 Cambridge Technical Certificate in IT

The aim of the qualification is to develop knowledge, understanding and skills of the essentials of IT and Cyber Security. The course will provide an insight into the IT sector, technological change, IT infrastructure and the importance of legal and security considerations. This qualification focuses on the skills required to support the needs of business through data analysis and decision making, to identifying the most suitable channel to communicate a business need and creating suitable content, or considering how emerging technologies can be used to support business needs.

There are 2 mandatory units:

Unit 1: Essentials of IT

Unit 2: Essentials of Cyber Security

2 additional units: Using Data Analysis Software plus either Using Emerging Technologies or Using Social Media Channels for Business

How will I be assessed?

The mandatory units in this qualification are externally assessed. He additional units are internally assessed and externally moderated by OCR Visiting Moderators.

KS4 OCR GCSE Computer Science 9-1

The aim of this course assists in developing a complex understanding of the most contemporary and emerging technologies in terms of how they work in different contextual environments. The course enables students to gain both technical and theoretical skills and apply the use of algorithms and complex problem solving in addition to programming skills. Students will independently develop their knowledge and understanding of computer technology to become astute computer scientists which will prepare them to develop a real life programming project.

Inspire ★ Challenge ★ Achieve

How will I be assessed?

Examinations

• Two written papers

• Computer systems (50% of the course)

• Computational Thinking, Algorithms and Programming (50% of the course)

Programming Project

• The programming project covers 20 hours of programming techniques, analysis, design, development, testing and evaluation and conclusions

• This is completed over a 20-hour period and consolidates the learning of the practical aspects of the course

Key Stage 5- OCR Cambridge Technical in IT Level 3

The aim of the course is to enable students the opportunity to develop the core specialist knowledge, skills and understanding required in the IT sector. This course allows our students to do so through applied learning with a combination of theoretical and practical based pedagogies.

Assessment Details:

5 units over two years (3 mandatories and 2 optional)

• 2 mandatory units are assessed externally in the form of a written paper. This makes up 50% of the total mark.

• 3 units are centre-assessed in the form of coursework and are moderated by a visiting moderator from OCR. These units make up 50% of the total mark.

This qualification is graded: Pass, Merit, Distinction and Distinction*.