

Overview

Warm greetings from the Computing Department of Millom School.

The collection, processing and communication of data happens all around us, underpinned by modern technology.

Knowing how and why data is gathered and being able to turn raw data into something meaningful is essential as the learner moves through education and into employment.

To be able to do this the learner will need to have the confidence to use a range of information technology, as well as being adaptable and resilient enough to deal with the rapid advances in the field.

Our team deliver a curriculum which is constantly being fine-tuned to fully prepare students for this rapidly evolving technological marketplace of employment.

Key Concepts: Information Technology

- understand and apply the fundamental principles and concepts of IT, including the use of IT in the digital world, Internet of Everything, data manipulation and Augmented Reality
- understand, apply and use IT appropriately and effectively for the purpose and audience
- develop learning and practical skills that can be applied to real-life contexts and work situations
- think creatively, innovatively, analytically, logically and critically
- develop independence and confidence in using skills that would be relevant to the IT sector and more widely
- plan, design, create, test and evaluate/review IT solutions and products which are fit for purpose and meeting user/client requirements and apply design and Human Computer Interface (HCI) considerations appropriate for a defined audience
- understand the impacts of digital technologies on the individual, organisation and wider society.

Key Concepts: Computer Science

- understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- think creatively, innovatively, analytically, logically and critically
- understand the components that make up digital systems, and how they communicate
- with one another and with other systems
- understand the impacts of digital technology to the individual and to wider society
- apply mathematical skills relevant to Computer Science.

Key 'Learning Capacities' in this subject

- Be able to work both independently and collaboratively
- Confidence to have a go, not be afraid to get things wrong and learn from mistakes
- Be able to tackle projects in a systematic and methodical manner

How will your child be learning?

- Teacher led instruction/demonstration
- Cloud based tuition/assessment/extension
- Whole class discussions
- Individual teacher/student discussion
- Scenario based extended projects

How will learning be assessed?

- Assessment for learning based on a comprehensive skills grid
- Targeted questioning
- Exam style questions building up to formal full paper assessment
- Question-level analysis of formal assessment

Subject progression

In year 9, as part of their option choices, students choose between Level 2 Information Technologies or GCSE Computer Science.

Beyond that, we offer Level 3 Information Technology at our 6th Form.

Career pathways

Whilst our subject underpins almost all others, it can lead to specialist careers in fields such as:

- IT Infrastructure Technician
- Emerging Digital Technology Practitioner
- Application developer

- Data Analyst
- Digital Marketer
- Business Administrator

What can you do to support your child?

Encourage your child to regularly log into our cloud-based learning suite, which will allow them to:

- Catch-up on any work they may have missed or didn't quite complete
- Receive and respond to feedback
- Extend their learning beyond classroom/timetable restrictions
- Target their areas for improvement in a systematic fashion

Equipment needed for this subject

Any digital device that can access the internet will allow your child to access our cloud-based learning suite.

Extra-curricular/Enrichment opportunities

Access to our computer facilities is available most breaks, dinners, and after school, for those who have difficulty accessing at home, or for those who wish to catch-up on or extend their learning.