

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 that is currently available, as well as being adaptable and resilient enough to deal with the rapid advances.

Our team of specialist professionals deliver a curriculum which has been fine tuned to fully prepare students for this rapidly evolving technological marketplace of employment.

Key Concepts

- The computer system (hardware/software)
- Presenting information (Desktop Publishing/Word processing/digital imaging)
- Data modelling (financial spreadsheets)
- Data handling (databases)
- Web design
- Programming in a text-based language (Python)
- Computational thinking (abstraction/pattern recognition/algorithms)
- Networks (topologies/hardware)
- Distribution channels (cloud/email)
- Project management (system development life cycle/SMART)
- Cyber security
- The Internet of things
- Legal, ethical, cultural and environmental issues

Key 'Learning Capacities' in this subject

- Be able to work both independently and collaboratively

- Confidence to investigate possible solutions; not be afraid to get things wrong and learn from their mistakes
- Resilience and perseverance: don't be reluctant to ask for help
- Foster a positive mind set
- Be able to tackle projects in a determined and systematic manner
- Able to communicate in a range of modes

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

- On-site Virtual Reality facilities which open the door to a world of new learning experiences
- Government run cyber security challenge
- Open door IT sessions outside of timetabled lesson time