

## COMPUTING & ICT

Information and Communication Technology is all around us. We want immediate access and control of information in a format that suits us.

By the time you finish ICT at Thomas Mills, you will be able to apply new ICT skills. You will learn about the immense power of ICT and the dangers that accompany such technology. ICT surrounds us in its many forms and it plays an essential role in society.

### **Key Stage 3**

In Years 7 and 8, students are taught Computing and ICT as part of the Design and Technology rotation. Students will be taught for two periods a week for a block of nine or ten weeks and then move onto the next subject. Our aim at Key Stage 3 is to build on basic knowledge and provide an excellent learning environment in order for our students to make very good progress through the key stages in Computing and ICT and be able to apply this knowledge throughout their other subjects. Some of the work undertaken by students consists of building upon their Presentation, Desktop Publishing, Spreadsheet and Coding skills.

### **Year 9**

In Year 9, students are taught ICT skills as part of a rotation with other subjects containing useful life skills. Our aim in Year 9 is to continue to build on basic knowledge and provide an excellent learning environment in order for our students to make very good progress through the key stages in ICT and be able to apply this knowledge throughout their other subjects. Some of the work undertaken by students consists of building upon their Presentation, Desktop Publishing, Spreadsheet and Word Processing skills.

### **Key Stage 4**

**Subject:** Computer Science

**Awarding Body:** AQA    **Code:** 8520

During Years 9, 10 and 11, students can choose to study the AQA Computer Science GCSE.

This GCSE course provide students with the opportunity to acquire new skills, knowledge and understanding necessary for future careers.

The subjects studied include the fundamentals of algorithms, programming, data representation, computer systems, computer networks, cyber security, aspects of software development and ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy.

### **Assessment**

The assessment for the course is via two written examinations and one piece of Non-Examined Assessment.

For more information about the course, please visit: <http://www.aqa.org.uk/subjects/computer-science-and-it/gcse/computer-science-8520/introduction>

### **Sixth Form**

**Subject:** Information Technology

**Awarding Body:** Pearson

**Lower Sixth** - Pearson BTEC Level 3 National Certificate in Information Technology

The Pearson BTEC Level 3 National Certificate in Information Technology is intended as an Applied General qualification covering 180 GLH and equivalent in size to one-half of an A Level. It is designed for learners who are interested in a basic introduction to the study of IT alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in IT.

Learners will develop a common core of IT knowledge and study areas such as managing and processing data to support business and using IT to communicate and share information.

**Assessment**

The LVI assessment is via one externally assessed unit and one internally assessed unit.

For more information please visit: <http://qualifications.pearson.com/en/qualifications/btec-nationals/information-technology-2016.html#tab-0>

**Upper Sixth** - Pearson BTEC Level 3 National Extended Certificate in Information Technology

The Pearson BTEC Level 3 National Extended Certificate in Information Technology is intended as an Applied General qualification covering 360 GLH and equivalent in size to one A Level. It is designed for learners who are interested in an introduction to the study of creating IT systems to manage and share information alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in IT.

Learners will develop a common core of IT knowledge and study areas such as the relationship between hardware and software that form an IT system, managing and processing data to support business and using IT to communicate and share information.

**Assessment**

The LVI assessment is via two externally assessed units and two internally assessed units.

For more information please visit: <http://qualifications.pearson.com/en/qualifications/btec-nationals/information-technology-2016.html#tab-1>

**Subject:** Computer Science

**Awarding Body:** AQA **Code:** 7516 (AS) 7517 (A2)

Advances in computing are transforming the way we work and our new Computer Science specifications are changing with the times. AQA have worked closely with teachers to develop popular qualifications, refreshing the content where needed but retaining the most popular and effective aspects of the previous specifications.

This evolutionary approach has built on strong foundations to deliver flexible, accessible and rigorous qualifications, backed by top quality support, resources and professional development. Without the need for huge changes, AQA are delighted to present up-to-date specifications that focus on the knowledge, understanding and skills students need to progress to higher education or thrive in the workplace.

**Lower Sixth** – AS Level Computer Science

**Assessment**

The LVI assessment is via two external examination papers that students will sit in June.

**Upper Sixth** – A-Level Computer Science

**Assessment**

The UVI assessment is via one piece of Non-Examined Assessment and two external examination papers that students will sit in June.