

## Year 10 Computing

At Key Stage 4, we offer Computer Science GCSE, 9-1. This course give students an in-depth understanding of how computer technology works.

A summary of the course details for the new 2016 GCSE Computer Science course as it currently stands:

### *Paper 1: (40%) Computer systems*

- Systems Architecture
- Memory
- Storage
- Wired and wireless networks
- Network topologies, protocols and layers
- System security
- System so ware
- Ethical, legal, cultural and environmental concerns

### *Paper 2: (40%) Computational thinking, algorithms and programming*

- Algorithms
- Programming techniques
- Producing robust programs
- Computational logic
- Translators and facilities of languages
- Data representation

### *Programming project: (20%) Non-Exam assessment (NEA)*

- Programming techniques
- Analysis
- Design
- Development
- Testing and evalua on and conclusions

## IT

We also offer Level 1 and 2 certificates in IT, which provides our learners with the IT skills and knowledge needed by employers. This is a unit-based course, with a wide range of unit choices so each learner can work in an area of IT they are interested in developing.

### **What is the course?**

The full title of the course is TLM Level 2 Certificate for IT User Skills in Open Systems and Enterprise. It is a practical and vocational course which is fully recognised by sixth forms institutions.

### **Course Outline**

This course ensures you have a good grounding in IT use and digital

literacy so that you can do your very best in further study and in the workplace. The unit choice changes from year to year and is dependent on class interest. In previous years, students have completed units such as:

- **Improving productivity using IT:** Knowing how to work efficiently and effectively.
- **Imaging:** How to make professional, designer quality computer graphics.
- **Audio:** How to record, edit and produce audio. How to plan and create audio recordings, music, speech and special effects. How to analyse audio recordings.
- **Video:** How to storyboard, record, edit and produce videos for the creative purposes.
- **Desk-top publishing:** How to design, create, and edit high-quality publications.
- **Specialist software:** an investigation of a software of your choice, it can include programming, designing an app or creating a comic book.

### **How is the course assessed and graded?**

Skills are assessed through a series of practical tasks throughout the course. There is a single online exam at the end of the course, which comprises of multiple choice and short answers. All students taking the online exam will be graded using the A\*-C system in line with GCSEs.