

Business / ICT

# Computing

KS4

## Year 10

#### Content

#### Homework

#### Parent / Carer Support

**Computer systems** 

(50% of the overall qualification from Sep-May)

Computational thinking, algorithms and programming (50% of the overall qualification, Sep-May).

NEA (Non Exam Assessment) students will develop their practical skills in a problem solving context by coding a solution to a given problem.

Paper 1 - 1 hour and 30 minutes.
Computational thinking and problem solving (Sep-May).

Computational thinking, algorithms and programming (50% of the overall qualification, Sep-May).

NEA - students will develop their practical skills in a problem solving context by coding a solution to a given problem20% of the overall qualification (Sep-Dec).

Systems Architecture. Memory Storage. Wired/Wireles Networks. Network typologies, protocol and layers. System security. System software. Ethical, legal, cultural and environmental concerns.

Algorythms representation. Programming Techniques. Computational logic. Translators and facilities of languages. Data representation. (All modules) Students will be given regular homework consisting of exam questions and homework related to the topic area. At key points your child will complete end of topic assessments.

As a faculty we encourage parents/carers to support learning in a number of ways..

**Organisation:** encourage your child to check that they have all the equipment they need in their school bag the night before; look at completed work; encourage your child to plan their work; encourage your child to read around the topic; show an interest in the work your child is completing and talk to them about it.

**Revision:** encourage active revision using past papers and mark schemes (these will be provided); design posters of key information and talk through ideas that your son/daughter finds difficult.

Fundamentals of algorithms, programming fundamentals of data representation, computer systems, 40% of the overall qualification.

Fundamentals of data representation. Computer systems. Fundamentals of computer networks. Fundamentals of cyber security. Ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy. 40% of overall qualification.

### Study Guides, Resources & Extra Support

OCR - revsion guide available on squid. Past papers and schemes of work. Websites: BBC GCSE bitesize. OCR computer sceince website - past papers

https://ocr.org.uk/qualifications/gcse/computer-science-j276-from-2016/assessment/ Videos to support the concepts taught https://student.craigndave.org/gcse-videos