

Year 8 Computer Science

Curriculum Manager: Mr S Howe / Mr J Moore (KS3 – Co-ordinator)

Teaching Staff: Mr J Moore, Mr D Burgess, Mrs R Mazurek and Ms S Rashid

Curriculum Overview: Pupils will complete a range of interleaving ICT and Computing topics throughout Year 8, which includes a wide range of skills in preparation for their KS4 studies. All units are delivered and assessed via Google Classroom, which pupils have access to through their Ashton computer login. An overview of the year 8 units of study can be found below:

Website Development – Topic 1

The aim of this practical unit is to develop and practise the skills needed to develop interactive webpages to follow a given brief.

Pupils will gain experience with:

- Identifying a client’s needs and requirements
- Producing a range of planning documents
- Developing assets which are appropriate for a specific purpose
- Developing a multipage website
- Evaluating their work

Practical Programming: - Topic 2

The aim of this practical unit, is for pupils to get to grips with coding, using practical programming languages (python) to develop their skills in software development

Pupils will gain experience with:

- Syntax
- Variables
- For loops
- While loops
- Lists
- IF statements
- Program development
- Testing/feedback
- Evaluation/Improvement of outcomes

Communication and Networks – Term 3

The aim of this theory-based unit is to educate pupils on what networks are and how they work. Pupils will gain knowledge on how the world wide web is constructed and study associated legal and ethical risks,

Pupils will gain experience with:

- History of the internet
- Online workspaces
- Operating online
- Internet service providers
- Internet protocols
- Hardware/Software
- Network security
- Legal/ethical issues

Assessments:

Practical Exam at the end of topic 3

A range of assessment windows take place during each unit in line with The Dean Trust assessment policy threshold concepts. These include Self, Peer, Formative and Summative assessments.

Homework:

Pupils complete their homework using ‘Show My Homework’ or Google Classroom. All homework will be set using these systems and pupils can access it at home with their appropriate log in details.

Other Useful Information:

Useful web links: www.classroom.google.com, www.bbc.co.uk/education, www.codecademy.com , www.code.org, www.codecombat.com