

# ICT

Head of ICT - Mr S Howe

AS3 Co-ordinator - Mr J Moore

## Topics of Study in Year 7

**Computer Sciences** - *Problem solving through the use of algorithms and hands on coding*

**Information Technology** - *Using a wide array of software effective for a given purpose*

**Digital Literacy** - *How to use technology safely*

### Term 1

#### **The World of Digital Gaming**

In this practical unit, pupils will broaden and enhance their IT skills and coding abilities in the application of game design.

Pupils will work with a range of digital tools and techniques to produce effective game solutions.

Pupils will gain experience with:

- Game Genres
- Game Platforms
- Planning
- Design Principles
- Algorithms
- Creating Sprites
- Creating Backgrounds
- Reviewing your work

### Term 2

#### **Practical Programming: MicroPython**

In this practical programming unit, pupils will broaden and enhance their computing and programming skills, including the application of software development. Pupils will also work with a range of digital tools and techniques to produce effective programs and solutions. Pupils will also gain experience in using microcomputers.

Pupils will gain experience with:

- Effective searching
- Validity of information
- Website features
- How to code using HTML
- How to code using CSS
- Design and Planning websites
- Reviewing your work

### Term 3

#### **Living in a Digital World**

The aim of this unit is to encourage learners to think about mobile phones and personal digital devices that are used every day and also to explore the technology behind these devices and how they communicate with each other to create the digital environment we use in today's society.

Pupils will gain experience with:

- Mobile phones
- Personal computers (desktops, laptops and netbooks)
- Hardware/software
- Cyber Crime
- Health & Safety
- E-Safety

### Assessments:

*Term 1: Final game design assessment*

*Term 2: Final website design assessment*

*Term 3: Living in a digital world exam (Linear assessment of unit)*

### Key Dates:

*ICT Exam week: June*

### Homework:

*Students complete their homework using the ICT department Virtual Learning Environment (Moodle). All homework will be set using this system and pupils can access it at home once they have been given the appropriate log in details. The web address for Moodle is [thedeantrustmoodle.org](http://thedeantrustmoodle.org)*

### Other Useful Information:

*The ICT department run a programme of extra curricular activities including game design, web design and computer programming. The timetable will be displayed on Moodle and outside each of the ICT classrooms (Room's 1, 2 & 3)*