Subject: ICT/Computing

Year 9

OVERVIEW

In Year 9 students develop a range of skills that allow them to get a better understanding of different sectors of computing and ICT. Students will begin to develop their skills in 3 main areas: Digital Literacy, ICT and Computer Science.

The students build upon previous skills learnt to develop and enhance their knowledge and understanding. For example, developing Blockly (block code) in year 7 to Python (text-based code) in Year 8 and further developing this in Year 9. Students will further develop their graphic skills with a focus on photography, bitmap editing and understanding of iMedia theories which will support their understanding of the relationship between the media product, audience and purpose.

ICT

ICT and Creative iMedia Graphic Design

Developing planning, photography and bitmap editing skills to create a digital graphic

- Internet safety
- Understanding a Client Brief and target audience
- Principle of photography
- Research and planning techniques
    - Mood board
    - mind map
    - visual elements
    - visualisation diagram
    - Annotation
- Bitmap editing skill
- Exporting and file formats
- Evaluation

Assessment:

Practical assessment of project work and outcome

Computer Science

Computer Science and Programming

Computational thinking and programming text-based coding.

- Binary and Boolean logic
- Text-based coding (Python)
- Inputs, Outputs and error handling
- Decomposition Developing complex algorithms (problem solving)
- Understanding the terms, selection and how they apply to programming.

Assessment:

Practical assessment of a variety of tools used to create a product for a client.

Useful resources for supporting your child at home:

Programming:

Teaching coding made easier(TurningLab)

code combat https://codecombat.com/

Microbit Projects | micro:bit (microbit.org)

Learn Python https://www.learnpython.org/

Graphics:

Sue Farrimond Tutorials (google.com), snapseed App

Inkscape https://inkscape.org/ Free vector editing tool