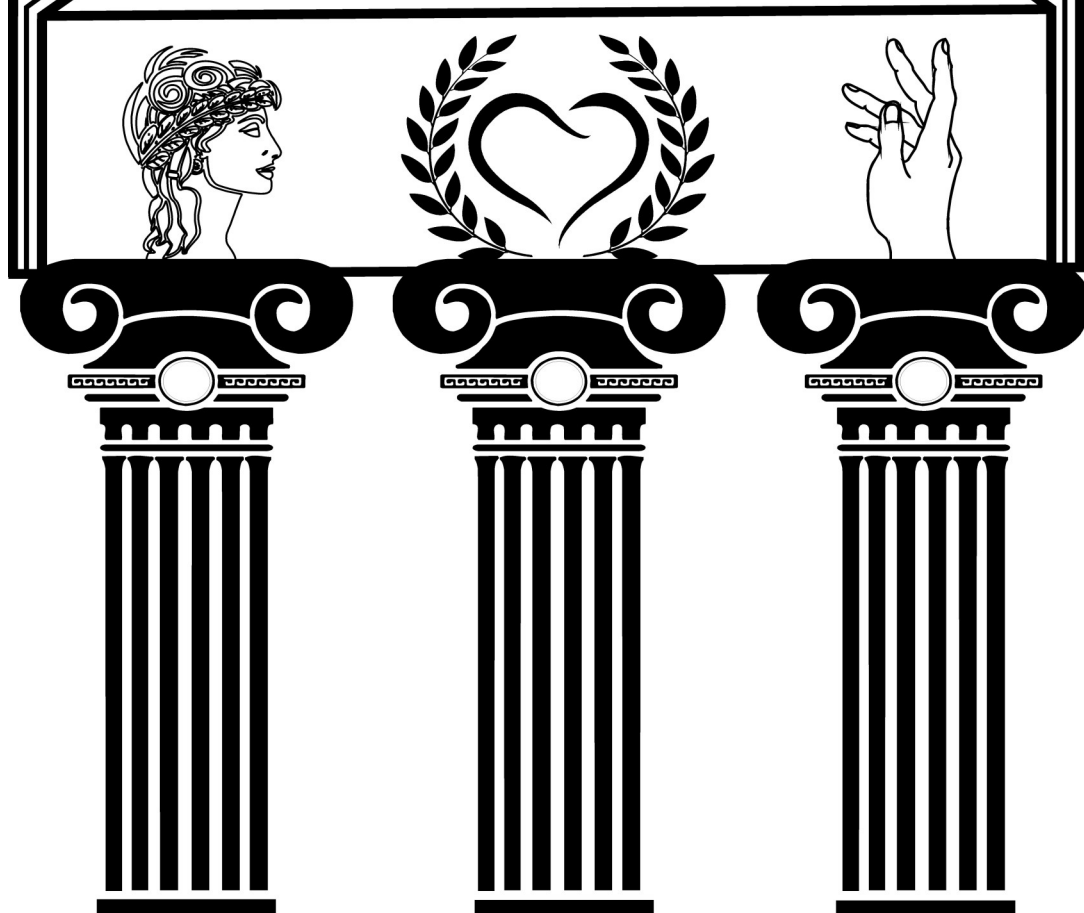# Malbank School Computer Science and ICT Curriculum

Year 7

We will develop a broad digital skill set for using technologies and creating them, giving students opportunities to think freely to develop solutions to problems, and to create problems for themselves. They will be able to independently understand and learn complex techniques for programming, then work in teams to create solutions.

Currency

Character

Culture

Head	Heart	Hand
Knowledge	Self-awareness	Creativity
Application of Knowledge	Awareness of others	Teamwork
Open to BIG ideas	LORIC	Skills

Malbank School Computing Curriculum

Organising

- Undertake creative projects that involve selecting, using, and combining multiple applications, (preferably across a range of devices), to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.

- Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.

Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy

Communication

- Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users;

Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability

Visual Programming

- Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems;

- Use two or more programming languages, [at least one of which is textual], to solve a variety of computational problems;

- Design and develop modular programs that use procedures or functions;

Undertake creative projects that involve selecting, using, and combining multiple applications.

• Leadership	• Opportunity to lead a team on specific issues.
• Independence	• Will be required to solve ICT work issues independently.
• Resilience	• Will be encourages not to seek help when solving certain problems.
• Organisation	• Must have good file management skills.
• Communication	• Opportunities to discuss developments with their work and to work in a team.
• Independence	• Will be required to solve ICT work issues independently.
• Motivation	• Keep going even though learning the different languages can be demanding for many.
• Communication	• Walk-through sections of code with other individuals.

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Modelling

- Undertake creative projects that involve collecting and analysing data and meeting the needs of known users.

Exploring Data

- Make appropriate use of data structures (for example, lists, tables or arrays);

- Understand the hardware and software components that make up computer systems;

- Understand how data of various types (including text, sounds and pictures) can be represented;

- Undertake creative projects that involve selecting, using, and combining multiple applications, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.

- Communication

- Independence

- Some children will be required to help others to analyse data through verbally communicating solutions.

- Decide then implement the appropriate structured independently.

- Independently research and configure a computer system.