Topic:

Year 10 Computer Science: Computational thinking: 2.1, 2.2, 2.3 (Semester 1)

Knowledge:

- Algorithms
- Programming techniques
- Programming robust programs

Skills:

Learners will need to draw on this underpinning content when completing any programming projects.

Indicators of Expected Progress

MEG 2:

- Be able to use a flowchart
- Be able to use and explain variables
- Know of the three basic programming constructs
- Explain the basic data types

MEG 5:

- Be able to use pseudocode
- Be able to explain computational thinking
- Understand the theory behind sorting algorithms
- Be able to explain and use the basic programming constructs
- Be able to write to a file
- Be able to test programs

MEG 8:

- Understand the theory behind searching algorithms
- Be able to use and explain SQL
- Be able to explain and use the different teaching methods

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Keywords: Algorithms

- Algorithm
- Abstraction
- Decomposition
- Algorithmic thinking
- Pseudocode
- Flowchart

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Keywords: Programming techniques

- Variable
- Constant
- Operators
- Input
- Output
- Assignment
- Statement
- Sequence
- Selection
- Iteration
- SQL
- Array
- Data Type

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Keywords: Programming robust programs

- Testing
- Syntax error
- Logic error
- Validation

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