Long Term Plan Subject: Computer Science Y10 Year: 16-18

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| **Term** | **Topic (s)** | **Assessed Work** | **Additional details** |
| Term 1 a | Introduction to Computer Science GCSE, including using Python.  Algorithms | End of Unit Test | Students given the GCSE Computer Science book and access to Cambridge Elevate –Online version of book and Interactive resources.  Students also given a copy of the Python Programming Guide |
| Term 1 b | Iteration  Boolean Logic | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 2 a | Data Types and Data Structures  Searching and Sorting Algorithms | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 2 b | Input and Output  Problem Solving | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 3 a | Binary & Hexadecimal  Binary Representations | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 3 b | Programming Languages  Preparation for NEA | End of Unit Test  Practice exercises | Students complete Cambridge Elevate activities |

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| Term 4 a | NEA –Programming Project | NEA (20%) of final mark | Students require NEA login with no access to the Internet.  They have 20 Hours to complete this project. |
| Term 4 b | Computer Systems: Hardware  Computer Systems: Software | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 5 a | Networks  Computer Security | End of Unit Test  End of Unit Test | Students complete Cambridge Elevate activities  Students complete Cambridge Elevate activities |
| Term 5 b | Ethical, legal, cultural and environmental concerns  Revision | End of Unit Test  Trial Exams | Students complete Cambridge Elevate activities |
| Term 6 a | Revision | Trial Exams |  |