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| **Curriculum Overview: Computer Science** |

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|  | **Year 7** | **Year 8** | **Year 9** | **Year 10** | **Year 11** | **Year 12** | **Year 13** |
| **HT1** | **Theory -ESafety & Computer hardware** **Programming - Scratch basics** | **Theory –E Safety & introduction to networks****Programming -** | **Theory – Computer Architecture****Programming – Python basic** | **Section 1 – System Architecture** **Section 6 – programming – sequence & selection** | **Revision of Yr 10.****Section 8 – Data representation.****Programming -Records & files.** | **Section 1: Components of a Computer****Section 6:****Data Types** | **Section 9: Legal, moral, ethical and cultural issues****Section 11: Programming techniques** |
| **HT2** | **Theory - Computer hardware****Programming – Programming in Excel.** | **Theory –System software Operating systems****Programming -** | **Theory – Computer Architecture****Programming – Python basic** | **Section 2 – Wired & wireless networks****Section 6 – programming- Iteration** | **Revision****Section 8 – Data representation.****Programming -Records & files.** | **Section 1: Components of a Computer****Section 2: Software systems****Section 8:****Boolean Algebra****Project: Analysis** | **Project:****Development** |
| **HT3** | **Theory - How the Internet works****Programming – Introduction to Micro:bit Programming** | **Theory –Binary/Denary conversion****Programming -** | **Theory – Wired & wireless networks****Programming – Python data types** | **Section 3 – System software and security****Section 6 – programming-Iteration** | **Revision – exam papers****Programming – practice writing of programms** | **Section 2: Software systems****Section 4:****Exchanging Data****Project: Analysis** | **Section 12: Algorithm****Project: Development** |
| **HT4** | **Theory –Introduction to Binary numbers****Programming – Micro:bit Programming. Create useful scripts.**  | **Theory –System security****Programming -** | **Theory – Wired & wireless networks****Programming – Python – If statement** | **Section 4 – Ethical, legal issues****Section 6 – programming-arrays** | **Revision – exam papers****Programming – practice writing of programms** | **Section 3: Software development****Section 7: Data Structures****Project: Design** | **Revision****Project: Development to inform** |
| **HT5** | **Theory –Copyright and legal issues****Programming – Trinket Turtle introduction**  | **Theory –Effect of technology on environment****Programming -** | **Theory – System software and security****Programming – Python – For - loop** | **Section 7 – Logic & languages****Section 6 – programming – Procedures & functions** | **Revision – exam papers** | **Section 5: Network and web technologies****Section 7:****Data Structures****Project: Design** | **Revision** |
| **HT6** | **Programming – Introduction to HTML** | **Programming -** | **Theory – Ethical, legal issues****Programming – Python – While - loop** | **Revision** **Section 6 – programming – Procedures & functions** |  | **Section 5: Network and web technologies****Section 10:****Computational Thinking** |  |