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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 | Week 15 |
| Cycle 1 | **W/C 29/08** | **W/C 5/09** | **W/C 12/09** | **W/C 19/09** | **W/C 26/09** | **W/C 3/10** | **W/C 10/10** | **W/C 17/10** | **W/C 31/10** | **W/C 7/100** | **W/C 14/11** | **W/C 21/11** | **W/C 28/11** | **W/C 5/12** | **W/C 12/12** |
| **Term 1**  **Training days 1 &2/09** |  |  |  |  |  |  |  | **Term 2** |  |  | *Data/Planning Day 17 &18th* |  |  | *School Closes 16th* |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **W/C 2/01** | **W/C 9/01** | **W/C16/01** | **W/C 23/01** | **W/C 30/01** | **W/C 6/02** | **W/C 12/02** | **W/C 27/02** | **W/C 06/03** | **W/C 13/03** | **W/C 20/03** | **W/C 27/03** |  |  |  |
| Cycle 2 | **Term 3**  **School closed 2/1** |  |  |  |  |  |  | **Term 4** | *Data/Planning Day 9th & 10th* |  |  | *School Closes 31st* |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **W/C 17/04** | **W/C 24/04** | **W/C 1/5** | **W/C 8/05** | **W/C 15/05** | **W/C 22/05** | **W/C 5/6** | **W/C 12/6** | **W/C 19/6** | **W/C 26/6** | **W/C 3/7** | **W/C 10/7** | **W/C 17/7** |  |  |
|  | **Term 5** |  | *School closed 1/05* |  |  |  | **Term 6** |  |  |  |  |  | *Data/Planning Day 19 &20th* | *School closed* |  |
| Cycle 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Computer Science – Year 10

Long Term Plan 2022/2024

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|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 | Week 15 |
| Cycle 1 | **W/C 29/08** | **W/C 5/09** | **W/C 12/09** | **W/C 19/09** | **W/C 26/09** | **W/C 3/10** | **W/C 10/10** | **W/C 17/10** | **W/C 31/10** | **W/C 7/100** | **W/C 14/11** | **W/C 21/11** | **W/C 28/11** | **W/C 5/12** | **W/C 12/12** |
| **Term 1**  **Training days 1 &2/09** |  |  |  |  |  |  |  | **Term 2** |  |  | *Data/Planning Day 17 &18th* |  |  | *School Closes 16th* |
|  | **Data Representation**  Data storage units  Binary | Binary arithmetic  Binary shift | Hexadecimal | Characters | ASCII and Extended ASCII | Images | Sound  Compression | **System Architecture**  Architecture and Von Nuemann | CPU Components | Performance of the CPU | Embedded systems | Types of secondary storage  Virtual memory  Characteristics of SS | Review of learning |  |
| **W/C 2/01** | **W/C 9/01** | **W/C16/01** | **W/C 23/01** | **W/C 30/01** | **W/C 6/02** | **W/C 12/02** | **W/C 27/02** | **W/C 06/03** | **W/C 13/03** | **W/C 20/03** | **W/C 27/03** |  |  |  |
| Cycle 2 | **Term 3**  **School closed 2/1** |  |  |  |  |  |  | **Term 4** | *Data/Planning Day 9th & 10th* |  |  | *School Closes 31st* |  |  |  |
| **Networks**  Types of networks  IP Adresses and DNS  MAC Addresses | Topologies  Networking hardware | Virtual networks  Wireless networking  Packet Switching | Encryption  Client server and peer to peer | *Transmission media* | Network performance | Standards protocols and layers | **Network Security and Systems software**  Identifying and Analysing  forms of attack | Prevention | Operating Software | Utility Software |  |  |  |  |
| **W/C 17/04** | **W/C 24/04** | **W/C 1/5** | **W/C 8/05** | **W/C 15/05** | **W/C 22/05** | **W/C 5/6** | **W/C 12/6** | **W/C 19/6** | **W/C 26/6** | **W/C 3/7** | **W/C 10/7** | **W/C 17/7** |  |  |
|  | **Term 5** |  | *School closed 1/05* |  |  |  | **Term 6** |  |  |  |  |  | *Data/Planning Day 19 &20th* | *School closed* |  |
| Cycle 3 | **Programming**  Programming fundamentals | Sequence and Selection | Iteration | Arrays | Procedures and Functions | Records and Files  SQL | **Algorithms**  Computational thinking | Searching Algorithms | Sorting Algorithms | Developing Algorithms – flowcharts | Developing Algorithms - Pseudocode | Assessment |  |  |  |

Computer Science – Year 11

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|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 | Week 15 |
| Cycle 1 | **W/C 29/08** | **W/C 5/09** | **W/C 12/09** | **W/C 19/09** | **W/C 26/09** | **W/C 3/10** | **W/C 10/10** | **W/C 17/10** | **W/C 31/10** | **W/C 7/100** | **W/C 14/11** | **W/C 21/11** | **W/C 28/11** | **W/C 5/12** | **W/C 12/12** |
| **Term 1**  **Training days 1 &2/09** |  |  |  |  |  |  |  | **Term 2** |  |  | *Data/Planning Day 17 &18th* |  |  | *School Closes 16th* |
|  | Algorithms  Computational thinking | **Searching algorithms** | Sorting Algorithms  Bubble | Sorting Algorithms  Insertion | Sorting Algorithms  Merge | **Developing Flowcharts** | Developing Pseudocode | **Programming**  Programming fundamentals | Sequence and Selection | Iteration | Arrays | Procedure and functions | Records and files | **SQL** |
| **W/C 2/01** | **W/C 9/01** | **W/C16/01** | **W/C 23/01** | **W/C 30/01** | **W/C 6/02** | **W/C 12/02** | **W/C 27/02** | **W/C 06/03** | **W/C 13/03** | **W/C 20/03** | **W/C 27/03** |  |  |  |
| Cycle 2 | **Term 3**  **School closed 2/1** |  |  |  |  |  |  | **Term 4** | *Data/Planning Day 9th & 10th* |  |  | *School Closes 31st* |  |  |  |
| Logic and Language  Logic diagrams and truth tables | Boolean Logic | Defensive Design | Errors and testing | Translators and |Facilities | *IDE* | Python statements |  |  |  |  |  |  |  |  |
| **W/C 17/04** | **W/C 24/04** | **W/C 1/5** | **W/C 8/05** | **W/C 15/05** | **W/C 22/05** | **W/C 5/6** | **W/C 12/6** | **W/C 19/6** | **W/C 26/6** | **W/C 3/7** | **W/C 10/7** | **W/C 17/7** |  |  |
|  | **Term 5** |  | *School closed 1/05* |  |  |  | **Term 6** |  |  |  |  |  | *Data/Planning Day 19 &20th* | *School closed* |  |
| Cycle 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |