



|    | Autumn 1                                                                                                                                                                                                                                                                                                                                                                                                             | Autumn 2                                                                                                                                                                                                                                                                                                                                                     | Spring 1                                                                                                                                                                                                                                                                                                                          | Spring 2                                                                                                                                                                                                                                                                                                                                                        | Summer 1                                                                                                                                                                                                                                                                            | Summer 2                                                                                                                                                                                                                                                                                                                                     |
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| 12 | <b><u>COMP 1: Computer Architecture</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.1.1 Structure and function of the processor (6)<br>1.1.2 Types of processor (6)<br>1.1.3 Input, output and storage (6)<br><br><b><u>COMP 2: Programming &amp; Computational thinking</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.2.1 Programming techniques (10) (CL)<br>2.1.1 Thinking abstractly (4) | <b><u>COMP 1: Computer Systems</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.2.3 Software Development (6)<br>1.3.2 Databases (6)<br>1.3.3 Networks (6)<br><br><b><u>COMP 2: Programming &amp; Computational thinking</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.2.1 Programming techniques (8) (CL)<br>2.1.2 Thinking ahead (4) | <b><u>COMP 1: The Web.</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.3.4 Web Technologies (7)<br><br><b><u>COMP 2: OOP and Computational thinking</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.2.1 Programming techniques (5) (OOP)<br>2.1.3 Thinking procedurally (4)<br>2.1.4 Thinking logically (4) | <b><u>COMP 1: Issues and the Law</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.5.1 Computing related legislation (5)<br>1.5.2 Moral and ethical Issues (5)<br><br><b><u>COMP 2: OOP and Computational thinking</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.1.5 Thinking concurrently (4)<br>2.2.1 Programming techniques (10) (OOP) | <b><u>COMP 1: Data Structures</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.4.2 Data Structures (5)<br><br><b><u>COMP 2/3: Project planning</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.2.2 Computational methods (10)<br>2.3.1 Standard Algorithms (7) | <b><u>COMP 1: Revision and prep.</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>No new knowledge and skills will be taught, revision exercises will take place. (5)<br><br><b><u>COMP 2/3 - Project</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>3.1. Analysis of the problem – The project will be started here. (12) |

|    | Autumn 1                                                                                                                                                                                                                                                                                                                                                                                                                                          | Autumn 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Spring 1                                                                                                                                                                                                                                                                                                                                                                                   | Spring 2                                                                                                                                                                                                                       | Summer 1                                                                                                                                                                                                                       | Summer 2               |
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| 13 | <b><u>COMP 1: Software</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.2.1 Systems Software (8)<br>1.2.2 Applications Generation (6)<br><br><b><u>COMP 2: Recap</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.2.3 Software Development recap – prep for the remainder of the project (4)<br><br><b><u>COMP 3: Project (design stage)</u></b><br><b><u>Knowledge and skills</u></b><br><br>3.2 Design of the solution (10) | <b><u>COMP 1: Encryption and compression</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.2.4 Types of Programming Language (8) – Theory for the Comp1 exam<br>1.3.1 Compression, Encryption and Hashing (6)<br><br><b><u>COMP 2: Revision</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>No new knowledge and skills will be taught, revision exercises will take place. (5)<br><br><b><u>COMP 3: Project (development stage)</u></b><br><b><u>Knowledge and skills</u></b><br><br>3.3 Developing the solution (15) | <b><u>COMP 1: Algebra</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>1.4.1 Data Types (4)<br>1.4.3 Boolean Algebra (8)<br><br><b><u>COMP 2: Algorithms</u></b><br><br><b><u>Knowledge and skills</u></b><br><br>2.3.1 Algorithms (complex) (10)<br><br><b><u>COMP 3: Project (evaluation and completion)</u></b><br><b><u>Knowledge and skills</u></b><br><br>3.4 Evaluation (8) | All knowledge and skills will be completed by this stage.<br><br>Students will complete personalised revision addressing their weaker topic areas. This is to ensure they are completely ready for their A level examinations. | All knowledge and skills will be completed by this stage.<br><br>Students will complete personalised revision addressing their weaker topic areas. This is to ensure they are completely ready for their A level examinations. | External A level exams |