**Curriculum Mapping 2022-23**  **Subject:**  **INFORMATION TECHNOLOGY** **Curriculum Leader (s)**  **PEL**

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|  | **KS3 Curriculum**1. Teaching crucial knowledge.
2. Exposing to key vocabulary.
3. Developing cultural capital.
4. Enabling the development of knowledge.
5. Challenging misconceptions.
6. Emphasising inter-connectedness.
7. Teaching and development of skills.
 | **KS4 Curriculum**1. Transition to education after KS4
2. Developing further on the attitudes and attributes for success.
3. Building on all areas from KS3 and Accelerated Curriculum.
4. Guidance for next stage of education
 | **KS5 Curriculum**1. Transition to HE/FE/Employment (including apprenticeship).
2. Developing further on the attitudes and attributes for success.
3. Building on all areas from KS3 and KS4.
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|  | **Year 7** | **Year 8** | **Year 9** | **Year 10** | **Year 11** | **Year 12** | **Year 13** |
| **Spiral****Curriculum** | **Vertically integrated across Key Stages – Each KS** |
| **Skills** | Computational thinking AbstractionDecompositionAlgorithmic thinking Problem solving Coding (Scratch & Python) Spreadsheet Modelling Mathematical ConceptsCommunication | Computational thinking AbstractionDecompositionAlgorithmic thinking Problem solving Coding (Scratch & Python) Spreadsheet Modelling Mathematical ConceptsCommunication | Computational thinking AbstractionDecompositionAlgorithmic thinking Problem solving Coding (Scratch & Python) Spreadsheet Modelling Mathematical ConceptsCommunicationInvestigation and practical applicationAnalysis and evaluative skillsDesign and implementation | * Research skills
* Report writing
* Communication
* UI Analysis, development and design
* Evaluation
* Extended writing
 | * Research skills
* Report writing
* Communication
* Data analysis
* Data modelling planning and development
* Evaluation
* Decision making
* Extended writing
* Revision/Exam Practice

\*Skills for Exam needs to be added | * Research skills
* Report writing
* Referencing
* Communication
* self-management
* Database planning, development and evaluation
* problem-solving
 | * Report writing
* Referencing
* Spreadsheet planning, development and evaluation
* Extended writing
* Meeting deadlines
* Analysis
* Communication
* self-management
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| **Knowledge & Understanding** **Key Topics per half Term**  | T1 – Introduction to IT facilities, rules & rituals, expectationsE-safety T2 – Introduction to Computer Science (PEL lessons)T3 – Computer NetworksT4 – Spreadsheet ModellingT5 – Scratch ProgrammingT6 – Scratch Programming | T1 – Introduction to IT facilities, rules & rituals, expectationsE-safetyT2 – Computer Systems T3 – Spreadsheet ModellingT4 – Spreadsheet ModellingT5 – Python ProgrammingT6 – Python Programming | T1 – Introduction to IT facilities, rules & rituals, expectationsE-safetyT2 – CybersecurityT3 – Data ScienceT4 – Data ScienceT5 – Physical Computing (micro:bit) T6 – Physical Computing (micro:bit) | T1: User interface analysis, report writingT2: CW 1 begins & project planning techniques, design and develop user interface & review T3: Complete CW 1T4: Begin spreadsheet CW 2T5: Complete spreadsheet unit CWT6: Start Comp 3: Exam Unit Prep | T1: Data and data analysis, report writing T2 – Review Spreadsheet skills, start C/W & TheoryT3 – Continue C/W & continue theoryT4 – Continue to CW & prep for C3T5 – Exam prep & Completion on C/WT6 | Unit 2 – Exam T1: Introduction to DBs – basic skillsT2 – Working through past paper & covering theory T3 – Jan 1st exam entry T4 – Revision for next exam//coursework catch upT5 – May RetakeT6 – Preparation for Unit 1 Exam Unit (Year 13)Unit 3: CourseworkT1 – Learning Aim A theory + courseworkT2 – Coursework completionT3 – Learning Aim B+C theory + coursework T4 – Coursework completionT5 – Preparation for Unit 1 Exam unit (Year 13)T6 – Preparation for Unit 1 Exam Unit (Year 13) | Unit 1: ExamT1 – Learning Aim A & BT2 – Learning Aim C, D & E. Mock assessment 1T3 – Learning Aim F & working through practice exam. Mock assessment 2T4 – Revision. Mock assessment 3 T5 - RevisionT6Unit 5: CourseworkT1 – Introduction to use DM in business, mini spreadsheet skills audit & learning aim A T2 – Coursework completion for Assignment 1. Learning Aim B+C theoryT3 – Refresh Spreadsheet skills. Release coursework assignment 2 T4 – Final coursework completion of assignment 2T5 – Wrap up on courseworkT6 |
| **Common Assessment of Progress and Performance** **(CAPP)**  | Use of MCQs One formal assessment per half term | Use of MCQs One formal assessment per half term | Use of MCQs One formal assessment per half term | Coursework components 1 & 2 Component 3 – Exam Unit – topic test Knowledge Organisers/Retrieval Grids | Coursework component 2 Component 3 – Exam Unit – topic test as well as full paper assessment, termly (Christmas & Easter)Knowledge Organisers/Retrieval Grids | Unit 2Knowledge Organisers/Retrieval GridsTopic testsMock assessment in November and MarchUnit 3Knowledge Organisers/Retrieval GridsCoursework Assignments 1 & 2  | Unit 1Knowledge Organisers/Retrieval GridsTopic testsMock assessment in November and MarchUnit 5Knowledge Organisers/Retrieval GridsCoursework Assignments 1 & 2 |
| **Wider Curriculum including extracurricular opportunities** **e.g SMSC ,Careers and Employability , Literacy and Numeracy**  | * Careers showcasing CS via code.org
* STEM Ambassadors'’ visits/talks either in person or virtually
 | * Careers showcasing CS via code.org
* STEM Ambassadors'’ visits/talks either in person or virtually
 | * Careers showcasing CS via code.org
* Amazon Future Engineer Virtual FC Tour
* STEM Ambassadors'’ visits/talks either in person or virtually
 | * BIMA mix of IT & CS
* STEM Ambassadors'’ visits/talks either in person or virtually
 | * STEM Ambassadors'’ visits/talks either in person or virtually
 | Conference \*\*Social media business presenter early on Business studies session for unit 3 Marketing  | Conference \*\*  |
| **Attitudes & Attributes****Growth Mindset,****Independent Learning**  | * T2 Topic – problem solving
* T5&6 – programming unit, creativity, resilience, problem solving
 | * T5&6 – programming unit, creativity, resilience, problem solving
 | * T5&6 – programming unit, creativity, resilience, problem solving
 | * Checklist
* Progress Tracker with formal & informal assessments dates on
 | * Give the dates and get coursework done early
* Make sure they can see their assessment grades to see progress
* Checklists
* Tracker
 | * Use of study periods
* Having an area for resources for independent learning activities
* Specific activities on project management and communications
* Overall planning & Organisation
* Up to date videos for independent learning
* Mr Ali & Ms Edwards

  | GCFree |

**Intent –** Implementation – Impact

Intent - The ambitions and plans that are in place up to the point of delivery

Implementation – the means for how these are delivered and assessed

Impact – the achievements of students as evidence by work produced, attitudes to learning, participation in extra curricular, summative assessment and final outcomes

Our definitions

**Spiral Curriculum**

How the building blocks of our curriculum are constructed and built upon through students’ journey through school