

**March – April :**

Understand programming techniques which will allow them to create independently programs to solve a problem. Students should also explore textual programming and should be given ample time to create programs to meet the specification requirements



• **The journey starts here:**



Term 1 🖐️



**September:**  
Develop an understanding of the architecture of the CPU, explore CPU performance and understand the purpose of embedded systems.



Term 2 🍁



**January – February**

Explore algorithm design and effectively solve problems by designing a solution in either a flowchart, pseudocode, or Exam Reference Language. Students should also be able to recognise common algorithms used by a computer including searching and sorting.

Term 3 🧊



**May:**

explore how to produce well designed programs which are maintainable. They will learn how to debug their programs and test to ensure all possible outcomes

Term 5 🦋



**June:**

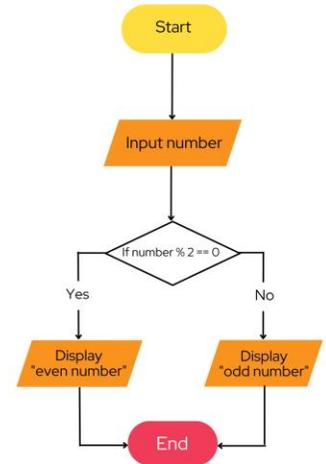
produce logic gates to show how a computer manages circuits and predict outputs. Students can show outputs of logic gates through truth tables.

Term 6 🖐️



**July:**

recognise the difference between types of programming languages and the support that is given to programmers through an IDE.



**October – December:**

students understanding of how data is represented in a computer, by understanding different number systems and describing how sound, images and text are translated. Students will also understand how storage devices are used to save work and their characteristics. They will understand the difference between types of primary storage and how they affect the working of a computer system