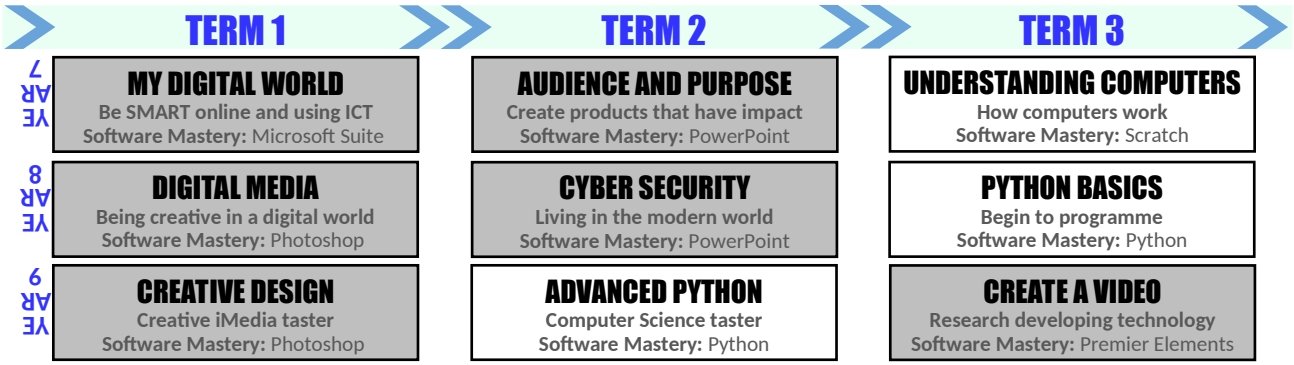
UNIT OVERVIEW & LEARNING JOURNEY

YEAR 10 – Computer Science: TERM 1

J277/01 – COMPUTER SYSTEMS

PRIOR LEARNING (from Key Stage 3):



Aim of the Unit

In this unit students will learn how to develop an understanding of computer systems function. Students will learn the role of the CPU, Memory, and the need for secondary storage.

Topics to be covered:

- Systems Architecture
- Memory
- Storage

Assessment Procedure

The topics covered in this unit, will help prepare students for some of the theory needed for Paper 1. This will be examined at the end of Year 11 and is worth 50% of the final mark for the course. During the lessons, students will undertake informal MCQ (multiple choice questions) to diagnose misconceptions. They will then undertake an end of unit assessment. The assessment will be out of 50 marks.

Homework

Homework will be set at least once a week. Seneca assignments will be assigned to help with knowledge retrieval in the run up to assessments. Details of individual homework can be found on Synergy.

How can you help?

Encourage your child to attend sessions with their teacher after school to improve their understanding. They should also review their theory regularly at home, as well as complete homeworks thoroughly as they are all from past exam papers. Support is also available through explainer videos contained on the class team's page.

Unit 1 – SYTEMS ARCHITECTURE, MEMORY, AND STORAGE (Knowledge)				
1.1 Architecture of the CPU	Date:	I	K	L
CPU | Fetch- Decode -Execute | Arithmetic Logic Unit | Cache | Registers | Control Unit | Von Neumann | Cores | Memory Address Register | Memory Data Register | Program Counter | Accumulator | Von Neumann				
1.2 CPU performance	Date:	I	K	L
Cores | Clock speed| GHZ| Overclocking | Embedded system				
1.3 Memory	Date:	I	K	L
Primary | Secondary |Virtual Memory | ROM | RAM				
1.4 Secondary Storage	Date:	I	K	L
Internal | External | Optical |Magnetic | Solid state | Flash | Durability |reliability | Cost |Portability | Capacity | Speed				

Revision, Test and Closing the Gap for topics covered so far	
TEST RESULT:	**Target Grade:**
Mark:	**Percentage:**
Grade:	**On target?**

FUTURE LEARNING: