Year 12 Autumn

LEARNING JOURNEY A LEVEL COMP SCI

COMPUTER SYSTEMS

This component will introduce you to the internal workings of the Central Processing Unit (CPU), the exchange of data and will also look at software development, data types and legal and ethical issues. It is expected that you will draw on this underpinning content when studying computational thinking, developing programming techniques and devising your own programming approach in the Programming project component. Learners will be expected to apply the nodes on this learning journey in different contexts including current and future uses of the technologies.

Structure and function of the processor

WE ARE HERE

Registers

FDE Cycle

Types of processor

Factors which affect performance

Pipelining

Von Neumann Architecture

Types of processor

CISC and RISC processors

GPUs

System software

Input, output and storage

Storage devices

RAM and ROM

Virtual storage

System software

Operating Systems

TUDOR HABITS

You will develop grit and resilience as you develop both your research and project skills on this learning journey.

VOCABULARY: Register, Processor, Architecture, Software, System