Computer Science Learning Journey

GCSE Examinations & A Level









Mock

Paper 2 Revision

Systems Software to NEA

Mock

Paper 1 Revision

Systems Architecture to

YEAR





Ethics and Law

NEA

None Examinable Assesment **Programming Project** Highlights programming skill

Python Programming 2

Functions Libraries **Procedures** File Handling Python Programming 1

Input/Output Selection Iteration Conditions



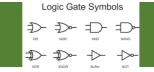


Binary **Binary Operations** Hexadecimal **Assembler**



Translators and IDE

Functions of an IDE Programming tools **Translators** Compilers



Computational Logic

Logic Gates Trace Tables Truth Tables Physics to Computing

YEAR



Systems Software

Role of the OS

Types of OS

Embedded Systems

Backups and Tools



Ethics and Law

Computer Misuse

Data Protection

Copyright Act

Crimes

Sequencing **Flowcharts** Pseudocode Documentation

Algorithms



Robust Programming

Error Trapping Secure Code Scope Variable Conventions











System Security Networks and Topologies Memory & Storage

Firewalls Viruses and Threats Hacking Laws

Wired vs Wireless **Network Topologies Protocols** Layers

RAM & ROM Volatile & Non Volatile Secondary Storage Types of Storage

Systems Architecture

Function of the Processor Von Neumann Architecture Registers & Busses Fetch Execute Decode

YEAR

YEAR



Computational **Thinking**

Decomposition **Abstraction** Algorithms Pattern Recognition



Python Programming

Sequence Selection Iteration Debugging **Variables**



Algorithms & Logic Gates

Searching Algorithms Sorting Algorithms Complex Logic Gates Truth Tables





Algorithms Coding Concepts Programming Constructs Block Based Programming



Systems Hardware Software **Networks**



Representation

Units, Binary, Denary **Adding Binary Numbers ASCII**

