Keys and Overview

Computing @ MCA

Computer Science (CS)	Information Technology (IT)	Digital Literacy (DL)
• Understanding how computers and computer systems work • Developing computational thinking • Programming	• Having the skills to create, manipulate, store and retrieve digital content • Selecting the right software to accomplish given goals	• Using technology safely and responsibly • Understanding opportunities technology offers for communication and collaboration • Evaluating digital content

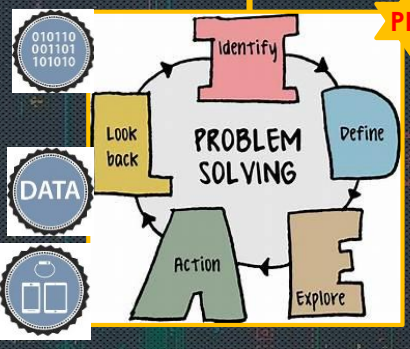
Symbol	Description
	Computer Science Pathway
	Digital Information Technology Pathway
	DIT and Computer Science Pathway
IT	Information Technology, Software Knowledge and Skills
CS	Computer System Skills – Understanding how computer system works
DL	Networking and Communication Knowledge and Skills
DAT	Data Handling Knowledge and Skills
CT	Computational Thinking, Algorithm and Problem Solving Skills
PRO	Programming Techniques and Skills
A	Assessment Point
PPE	Pre Public Exam
EL	External Link
ML	Maths Link
	Above and Beyond the Curriculum
National Curriculum Link	All topics and content in Curriculum Map are link to the Computing National Curriculum

Computing @ MCA

Year 11

Computer Science –use computational thinking and creativity to understand and change the world

DIT & CompSci– Develop capability, creativity and knowledge in computer science, digital media and information technology to change the world.



Computer Science – Creating Robust programs in and understand how CPU execute programs

Digital Info Tech – Impact of technology in our ethical, cultural, legal issues and safety

Digital Info Tech – Data Handling and Creating Dashboard

Digital Info Tech User Experience Design – digital strategy and customer experience

Sharp Future (digital) Trips

Revision Techniques

Computer Science – Networks Threats and Cyber - Security

Computer Science – Computer Network to share information and resources

Year 10

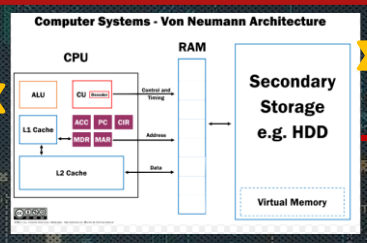
Digital Info Tech – Developing project planning skills and designing user interfaces,

Digital Info Tech – Analysing and reviewing different user interfaces and justify their design principles

Digital Info Tech – Creating User Interface

Computer Science – More Programming Techniques which extend into game design, app development, etc.

Computer Science – Algorithms, Binary, Linear Search. Bubble Insertion & Merge Sort



Computer Science – looking at how the CPU, Memory and Secondary Storage works

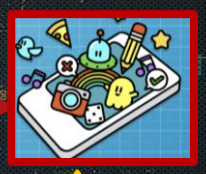
Digital Future Trips

Year 9

Career in Computing

Data Representation (Binary) and Logic Gates (AND, OR, NOT)

Mobile App Development- GUI Design and Programming Skills



Career in Computing

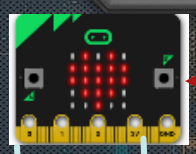
Computing System Hardware/Software

Creating Blogs or Website on Computer System & Networks

edublogs

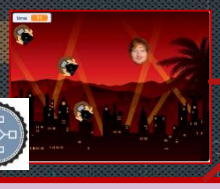
Intro to Python Programming & Algorithm Sequence, Selecti Iteration (Loops)

Year 8



Data Modelling (Spreadsheet Skills)

Baseline Digital Literacy Skills – Login, Folders, Files, etc.



Scratch Game Development – Block Programming

Computational Thinking skills

Apps & Animation Building

E- Safety & Cyber - Security

Year 7