Computing

Da Vinci Academy
A L.E.A.D. Academy

Time of year	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	Introduction to computing Internet safety	eSafety	Computing theory	Theory: Systems architecture Programming: Basics - Input/ Output, Variables	Theory: CPU, memory and storage (recap) Programming: Algorithms
Autumn 2	Programming essentials in Scratch	Cyber security	Media - Animations (Blender)	Theory: Memory & storage Programming: Data types, arithmetic, selection	Theory: Networks and security (recap) Programming: Variables, selection, iteration, spring and list
Spring 1	Components of a computer system	Introduction to programming (Python)	Advanced Python programming	Theory: Networks and security Programming: IF/ELIF, error handling and Boolean logic	Theory: System software and ethics (recap) Programming: Files, validation, subroutines and testing
Spring 2	Programming essentials in Scratch (Part 2)	Computational thinking and Boolean logic	Networks and communication	Theory: Systems software and ethics Programming: Loops (WHILE/FOR), file handling	Theory: Revision - all topics Programming: Pseudocode practice, IDEs, debugging
Summer 1	Modelling data using spreadsheets	Image manipulation	Applying programming skills with physical computing (BBC Micro bit)	Theory: Revision Programming: Lists, strings, practical mini project	Theory: Revision Programming: Revision
Summer 2	Developing a PowerPoint	Website development	App development	Theory: Revision Programming: End of year coding challenges	External examinations