

3Cert Computing Curriculum Overview

	Year 7	Year 8
Autumn Term	E-safety and Security Understanding digital safety and creating a promotional poster using Microsoft Publisher	Databases <ul style="list-style-type: none"> • The positive and negative effects of databases in everyday life. • To begin to understand database terms and concepts • To look at a database and use the 'Filter Tool'. • To understand what makes a good questionnaire • To write and phrase questions in order to get useful and precise results from data
	Understanding Computers What is a computer, understanding hardware, software and computer components	Advanced Databases <ul style="list-style-type: none"> • Explain what a query is • Understand the difference between a query and a filter • Understand the difference between validation and verification • Apply simple validation rules to a database-Create a database report • Annotate a report to explain what it shows • Understand why we use reports
Spring Term	Programming Basics Using small basics to create a program with inputs, outputs and 'if' statements	Modelling Data Learn the concepts of Modelling Data in a spreadsheet. Learn to understand how to construct formula and functions and create spreadsheet mode.
	Data Representation Understanding binary, bits and bytes, ASCII, Hex, Unicode, denary	Scratch programming Learn the basics of how to use a series of programming statements to create an interactive program. Design an animated product and fully program it so that it will have data input into the product and also output data to the user.

Summer Term	Digital Creativity with Graphics Understanding graphics and how to use Photoshop	Scratch programming Advanced Extend understanding of computational thinking, linear logic and the use of visual programming environments through the use of the Scratch.
	Spreadsheet Modelling Understanding how to add, remove and edit information using Microsoft Excel	Computer Crime and Cyber Security <ul style="list-style-type: none"> • Legal safeguards regarding computer use • Computer Misuse Act • Data Protection Act and Copyright Law and their implications for computer use • Phishing scams and other email frauds, hacking, “data harvesting” and identity theft • Protecting online identity and privacy • Health and Safety Law • Environmental issues such as the safe disposal of old computers

More in-depth information and support for parents is available for every subject in the following documents:

- Termly ‘I can’ statements for each 3Cert course
- Course handbooks for every term

All 3Cert courses are assessed formally through exams at the end of each term. These dates are in the Academy calendar.