

	ICT Skills. Digital media and project management skills	Laws and Regulations. Computer Systems, Hardware and software	Computer Science Skills and data representation	Application of Computational Thinking
Mastered (M)	Has a comprehensive and well organised filing system. Can search for trustworthy information on the internet and record the location in which information was obtained. Can use a variety of applications, including web design, graphics design and presentations, confidently utilising some of their advanced features and techniques. Can complete a project to a near professional standard, fully documenting all project stages. Can outline in detail the purpose and the target audience of a project during its planning stage. Can suggest valid improvements and improve their work further.	Know how to follow General Data Protection Regulation, Computer Misuse Act and Copyright, Designs and Patents Act. Know what Creative Commons License is. Be able to find and use copyright-free data and images consistently in all work. Know several methods of cyber attacks and how to prevent them or defend against. Be able to investigate how various computer systems hardware works and present this information for a set target audience. Know how data moves along a network and explain the need for common network protocols. Can code a multi-page website using HTML and CSS.	Be able to calculate binary to decimal conversions and vice versa and explain why computers use binary numbers. Be able to add two eight-digit binary numbers and explain an overflow error. Know how the logic gates are used and to be able to construct logic circuits using the different logic gates. Be able to construct flowcharts which design complex systems. Can construct formulae in a spreadsheet which will enable data analysis. Be able to apply validation rules to a database. Be able to construct queries in a database using SQL. Be able to use Python to convert binary, decimal and ASCII numbers and to code text messages into binary and ASCII. Be able to convert a two-bit image into binary and binary code into image.	Construct a program from an algorithm. Construct accurate algorithms to solve problems. Be able to develop a complex program using nested selection, iteration, lists, random numbers and subroutines. Use menus and user interface in programs. Use tkinter in Python to improve user interaction.
Good (G)	Can identify all of the common features of a word processor. Can save a word document with an appropriate name into a logical file format. Can distinguish between fact and opinion when searching for information on the internet. Can use a variety of tools, techniques and adjustments to create complex digital graphics. Can create a simple key frame animation. Can create a stop frame animation for a relevant purpose/audience. Can create a multi-page website with clear house style and layout. Can plan, implement and evaluate a creative project that relates to a relevant purpose/audience.	Explore the General Data Protection Regulation and how it aims to keep your data safe. Explain the penalties and offences of the Computer Misuse and Copyright, Designs and Patents Acts. Know several cyber security threats and effects caused by cyber attacks and hacking. Recognize several social engineering tactics. Know different types of malware. Be able to find and use copyright-free data and images. Be able to develop solutions to health problems associated with the use of computers. Know how computer systems changed over the years. Can identify all main parts of computers and briefly explain their functions. Know different types of storage devices, their benefits and drawbacks. Know the purpose of system software. Understand the fundamentals of network security. Use HTML to code a web page.	Be able to convert binary numbers into decimal numbers and vice versa. Be able to add two binary numbers. Be able to construct a simple flowchart. Can use simple functions within a spreadsheet. Can use selection in a spreadsheet. Can choose the best type of graph to present data in a spreadsheet. Be able to sort and to search a database using filters. Be able to add data to a database, be able to modify a database. Know how graphics and text are digitally represented and stored by computers.	Design a program through the use of a pseudocode. Use decomposition to break down a scenario into more manageable chunks. Be able to construct a simple flowchart. Construct a program which demonstrates the use of selection and/or iteration in Scratch and Python. Create and use variables in programming. Understand subroutines and use simple subroutines to improve programs efficiency. Create lists /arrays and perform simple list operations.
Developing (D)	Can construct a polite e-mail and attach documents. Can identify some of the common features of a word processor. Can save a word document with an appropriate name. Can search for information on the internet which is trustworthy. Can combine several digital graphics using specialist software. Can create a stop frame animation that contains background and images. Can create a website of three or more pages. Can plan and implement a creative project that relates to a relevant purpose/audience.	Define cyber security key terms. Describe the function of the Copyright, designs and patent act. Be able to identify the safety issues related to the use of computers. Know main parts of a computer system and their functions. Know the main hardware devices and their use. Know different types of software. Know how computers connect to a network, benefits and drawbacks of networking.	Be able to convert decimal numbers into binary numbers. Be able to interpret a flowchart. Can format data in a spreadsheet and use conditional formatting. Can perform simple arithmetic calculations in a spreadsheet. Can make a graph in a spreadsheet. Be able to collect data by designing and using questionnaires and data collection forms.	Design a program through the use of a flowchart. Be able to construct a program in Scratch or Python using sequence techniques and debug simple errors within a program. Be able to modify a program to achieve a desired result. Interpret pseudocode for specific scenarios. Use abstraction to filter out the irrelevant data from a scenario
Emerging (E)	Can setup a suitable file system to manage documents on their home drive. Can construct a polite e-mail. Can make simple changes to a word document such as altering the page layout and font size and design. Can save a word document. Can search for information on the internet. Can modify digital graphics using specialist software. Can create a simple animation. Can create a simple webpage, following a template. Can implement a creative project using a template.	Understand who stores data about you and why. Define e safety key terms. Know how to abide by the Copyright, Designs and Patents Act. Identify health issues related to the use of computers. Know how to follow basic e safety rules. Know how to set up a user name and a strong password and why. Know what a computer system is and can identify up to 5 different parts of a computer. Know how users connect to the internet.	Be able to identify positional notation and the first eight positional notations for binary numbers. Can enter numerical data into a spreadsheet. Identify key terms associated with databases.	Interpret flowcharts for specific scenarios. Describe the different types of computational thinking skills that can be employed in a Computer Science. Identify the different flowchart symbols. Construct simple sequential programs using Scratch and Python programming languages.