



# ICT: Year 9 Overview

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Digital Literacy and Citizenship</p> <p>In the first unit of year 9 we explore the use of the internet looking at:</p> <ul style="list-style-type: none"><li>• Internet safety</li><li>• Privacy and security</li><li>• Relationships and communication</li><li>• Cyberbullying</li><li>• Digital footprint</li><li>• Self image and identity</li><li>• Information literacy</li><li>• Creative credit and copyright</li></ul>	<p>Cryptography</p> <p>During this unit, pupils will learn about the use and purpose of cryptography and encryption of data. They will learn about the purpose and use of cryptography in everyday society and understand how the use of computers has enabled ever more secure and sophisticated methods of cryptography to be developed.</p>	<p>Python programming</p> <p>Python is a very popular text based programming language. Throughout this module, pupils will learn how to program using:</p> <ul style="list-style-type: none"><li>• Variables</li><li>• Constants</li><li>• Sequences of instructions</li><li>• Selection statements</li><li>• Iterative elements such as For loops</li></ul>	<p>Binary</p> <p>In this module pupils will expand their knowledge of how binary is used within a computer system. This unit covers:</p> <ul style="list-style-type: none"><li>• Converting to and from binary</li><li>• Binary addition</li><li>• Representing text</li><li>• Representing images</li><li>• Representing sound</li><li>• Converting to and from hexadecimal</li><li>• Logic gates and truth tables</li></ul>	<p>ECDL qualification</p> <p>In the last term of year 9, pupils will be entered for the ECDL qualification. This is a computer literacy qualification meaning all pupils have the opportunity to gain a recognised qualification in ICT whether they pursue the subject in KS4 or not. To gain this qualification, pupils will need to pass four exams on the following topics:</p> <ul style="list-style-type: none"><li>• Presentation skills</li><li>• Word processing skills</li><li>• Spreadsheet skills</li><li>• Improving productivity</li></ul>	