

Curriculum Intent Statement for **Computer Science**

At Chase Terrace Academy we aspire for all of our students to achieve greater things than they ever thought possible.

We pride ourselves on being a warm and welcoming school that places community at the heart of everything we do. Our ambitious curriculum is enriching and inclusive, providing challenge and breadth for all. This empowers our students to become compassionate, confident and creative individuals who are resilient, respectful and equipped with a desire to take up a fulfilling role in society and the wider world.

In Computer Science we aspire to enrich students with a varied and deep understanding of computing developments, concepts and the impact of technology on our society and environment. Students learn a diverse range of skills such as programming in a range of languages and also study the theory behind the science of computing, the Internet and the ever growing importance of our personal security and privacy. Ultimately, we aim to give students the knowledge and experience they need to study Computing to degree level, to use technology in their day to day lives or careers and to manipulate technology and tools to compliment almost any future study or job.

Year 9 Curriculum Implementation Plan (Computer Science)

Computer Science				
Knowledge and Skills – Students will be taught to...	Reading, Literacy and Numeracy	Formative Assessment	Summative Assessment	Link to GCSE Content
Use industry standard IDE tools in Visual Studio Create desktop applications using Python Programming skills including: <ul style="list-style-type: none"> • Debugging • Use of breakpoints • Sensible variable names • Using built in functions, libraries and procedures • Procedures and functions 	Reading: <ul style="list-style-type: none"> • Regular use of on screen sources of information • Research and online reading and extracts 	On screen reviews of student work Regular self assessment at key stages against level descriptors Regular opportunities to revisit previous tasks and improve based on feedback Verbal feedback on an individual basis Whole class feedback	Four end of unit on screen tests. One end of year assessment	Programming – GCSE Computer Science unit 2.2, 2.3 Business – Unit 1 of GCSE Business Components of a computer – GCSE Computer Science Unit 1.1, 1.2 and 1.3
	Literacy: <ul style="list-style-type: none"> • Extended written responses across units • In depth research and referencing of sources • Use of spelling and grammar tools • Regular review of in class work focussed 			

<p>Business:</p> <ul style="list-style-type: none"> • Entrepreneurship • The role of business • Risks and rewards of business • Types of business • Marketing and segmentation • Branding <p>Components of a computer:</p> <ul style="list-style-type: none"> • What makes a computer work? • What are the components of a computer? • How each component works and its role in the system • Operating systems • Building and configuring a PC for different circumstances and requirements <p>Online Behaviour:</p> <ul style="list-style-type: none"> • Negative Influences • Harmful Behaviour • Explicit Online Behaviour • Positive online contributions 	<p>on level of written response</p> <ul style="list-style-type: none"> • Modelling of appropriate level of written response <p>Numeracy:</p> <ul style="list-style-type: none"> • Algebra – variables and data types • Logic and decision making • AND, OR, NOT • Conditional statements • Calculations including: <ul style="list-style-type: none"> ○ Interest ○ Average ○ Min/Max ○ Number conversions ○ 	<p>Microsoft Forms based quizzes and quick tests with visual feedback</p>		
--	---	---	--	--

<p>Image manipulation:</p> <ul style="list-style-type: none">• The role of image manipulation in popular media• The impact of image manipulation on different areas of society• Image manipulation skills				
---	--	--	--	--