



CHS Curriculum Intent

SUCCESSFUL: Learners who gain deep and powerful knowledge in preparation for life; combining academic rigour, curiosity and creative flair.

CREATIVE: Learners who are imaginative, optimistic and inventive; finding their voice to become effective communicators prepared for lifelong adaptability

HAPPY: Learners who are confident, resilient, well-rounded citizens; they understand the world’s communities and are ready to discover their place in it.

CHS Curriculum Area Framework for Learning – Year 9

SUBJECT	BTEC Digital Information Technology Level 1/2
INTENT	<p>“I believe that at the end of the century, the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted” Alan Turning Studying Computing at Chorlton High School allows our students to be prepared for a digital world, digital careers and how to use digital systems safely and responsibly.</p> <ul style="list-style-type: none"> • Students will be taught the key skills to develop their digital literacy and awareness of computational thinking. • We aim to help our learners to become happy, successful and creative through our curriculum with students exploring a range of ways that the technology they interact with on a daily bases works and operates. Students are also able to develop their awareness through applying some of these in skillful tasks and activities.

Year Group	9
Rationale/ Narrative	<p>Following on from their Key Stage 3 study, students will be taught topics that overlap between the Computer Science and current DIT qualifications throughout their “Common Term”. Students following the Computer Science route will then move on to build up foundational knowledge regarding Paper 1 alongside their programming skills which will benefit them in regards to Paper 2: <u>Common Term</u></p>



CHORLTON HIGH SCHOOL: CURRICULUM

- During Autumn term, students will begin by studying the **impact of modern technologies**, this relates largely to how students have engaged with School over the past academic year and students will gain a deeper knowledge in how organizations and individuals use modern technologies to exchange information, communicate and complete work-related tasks, as well as access and manipulate data.
- It is vital students understand the implication of these tools and technologies so students will move onto looking at the **legal impact and ethical considerations** as well as the wider implications of digital systems and their use. Students will look at how legislation covering data protection, computer crimes and intellectual property has an impact on the way digital systems are used.
- Following on from this, Students will begin to understand the increased reliance of digital systems and it's need to hold onto data and the nature of threats to data through looking at **Cyber Security**, ways in which computer systems are attacked, how they occur and potential impact of breaches as well as preventative measures.
- Students will revisit **programming** (part of their common term) and build upon this knowledge to create an authorized login system as part of a programming project.
- Students will be introduced to Graphical User Interfaces (GUI's) through studying **User Interfaces** as part of Autumn 2, and will understand the different types of user interfaces used by individuals and organizations. They will investigate how Graphical User Interfaces differ from a range of other interfaces, (such as text based interfaces, making reference to their login system program), alongside **how hardware and software** influence User Interface design.

Year 9 Digital Information Technology

Component 1, Learning Aim A:

Component 1, Learning Aim B:

Component 2, Learning Aim A:

Component 2, Learning Aim B:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KNOWLEDGE	<ul style="list-style-type: none"> • Introduction to Computer Systems & Networks • Impact of modern technologies • Legal impact and Ethical considerations • Cyber Security 	<ul style="list-style-type: none"> • Programming • User Interface Design • Hardware & Software 	<p>C1LA</p> <p>User Interfaces</p> <ul style="list-style-type: none"> • Range of uses • Factors effecting choice of UI • Hardware & Software influences <p>Audience Needs</p> <ul style="list-style-type: none"> • Accessibility Needs • Skill Level • Demographics <p>Design Principles</p> <ul style="list-style-type: none"> • Colours 	<p>C1LB</p> <p>Project Planning</p> <ul style="list-style-type: none"> • Planning Tools • Methodologies <p>Creating Project Plans</p> <ul style="list-style-type: none"> • SMART aims/obj • Audience & Purpose • Project requirements • Timescales • Risks <p>Creating Initial Design</p>	<p>C2LA</p> <p>Characteristics of Data & Information</p> <ul style="list-style-type: none"> • Data • Information <p>Representing Information</p> <ul style="list-style-type: none"> • Text • Numbers • Tables • Graphs/Charts • Infographics <p>Ensuring Data is suitable for Processing</p>	<p>C2LB</p> <p>Data Processing Methods</p> <ul style="list-style-type: none"> • Data manipulation methods <ul style="list-style-type: none"> ○ Importing Data ○ Formulae ○ Decision making functions (<i>IF, WHATIF, SUMIF</i>) ○ Lookup functions (<i>VLOOKUP, HLOOKUP</i>)



CHORLTON HIGH SCHOOL: CURRICULUM

			<ul style="list-style-type: none"> Font Style/Size Language Amount of info Layout User Perception/Attention Intuitive Design <p>Designing efficient UI's.</p>		<ul style="list-style-type: none"> Validation Methods: Verification Methods: <p>Data Collection</p> <ul style="list-style-type: none"> Methods Features Big Data <p>Quality of information</p> <ul style="list-style-type: none"> Impact on decision making Quality of information factors <p>Sectors that use data modelling</p> <ul style="list-style-type: none"> Types of Sectors Data Modelling on decision making <p>Threats to Individuals</p>	<ul style="list-style-type: none"> String operation functions Count functions Logical Operators Sorting Outline Filtering Text to columns <ul style="list-style-type: none"> Other Processing Methods <ul style="list-style-type: none"> Cell referencing Macros Data validation Conditional Formatting <p>Producing a Dashboard</p> <ul style="list-style-type: none"> Show data summaries from data sets Appropriate presentation methods Appropriate presentation features
SKILLS	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Identifying and selecting information Breaking down key information 	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Exam technique Identifying and selecting information Breaking down key information <p>Programming skills:</p> <ul style="list-style-type: none"> Identifying and using variables Using operators Using inputs Using outputs Using sequence Using selection 	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Exam technique Identifying and selecting information Breaking down key information Design Skills Analysis Accessibility 	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Exam technique Identifying and selecting information Breaking down key information Project Planning Time management Contingency 	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Exam technique Identifying and selecting information Breaking down key information Data manipulation Spreadsheet formulae Security 	<ul style="list-style-type: none"> Evaluation skills Metacognitive practice Exam technique Data manipulation Spreadsheet formulae Security
ASSESSMENTS	<ul style="list-style-type: none"> Baseline KAP KAP – Cyber Security 	<ul style="list-style-type: none"> Classwork Piece – Students to have their final login program 	<ul style="list-style-type: none"> User Interface Design analysis – KAP 	<ul style="list-style-type: none"> Creating a project plan - KAP 	<ul style="list-style-type: none"> Classwork – Investigative piece – Data and information and impact on individuals – KAP 	<ul style="list-style-type: none"> Use given spreadsheet and use formulae to produce



CHORLTON HIGH SCHOOL: CURRICULUM

	<p>Assessment <i>(Watered down progress test from 2019/20)</i></p>	<p>assessed from their programming project - KAP</p> <ul style="list-style-type: none"> Progress Test based on content covered during Autumn term formally assess understanding and knowledge – KAP User Interface analysis assessment - KAP 	<ul style="list-style-type: none"> User Interface Design Project - KAP 	<ul style="list-style-type: none"> Progress Test - Project Planning MS Forms theory assessment Initial Design based on Project Plan - KAP 	<ul style="list-style-type: none"> Quality of information on given scenario – Classwork piece – KAP. 	<p>outputs (<i>Import data, formulae</i>)</p> <ul style="list-style-type: none"> Progress test – MS Forms – Data manipulation theory. Analysis of dashboard – KAP.
--	--	---	---	---	---	--