IT Curriculum Intent

The aim of Level 3 IT is to develop core knowledge, transferable skills and deeper understanding of the IT sector, whilst specialising in Application Development. Students will develop a range of systems and applications for real world clients, equipping them with multiple opportunities to develop their communication, planning, research, design, development, testing and evaluation skills. Students will establish transferable skills across the IT section and engage in meaningful employer involvement throughout their studies.

The aim of Level 2 IT is for students to develop skills, knowledge and understanding to progress onto employment or further study. Providing students an overview of the IT sector as they develop their knowledge of hardware, software, the World Wide Web, user interfaces, analysis of data, benefits of using IT in business and cyber threats and management. Students will develop transferable skills to use across their Level 2 qualification and in the wider world.

All our qualifications at Key Stage 4 and Key Stage 5 help us to accomplish our department's mission: to develop young people who are digitally literate, resilient and have problem-solving skills. Students will develop transferable skills to use across the curriculum, and in the wider world.

Years 7 and 8	NA
Year 9	In year 9 students will have the opportunity to study IT. All units studied in year 9 are linked to the national curriculum for KS3 Computing. Some BTEC content will be covered from the spring term of year 9.
Year 10 and 11	The curriculum has been designed to allow students to understand that technology is everywhere, be able to identify the technology they encounter and have a basic understanding of how it works. We also aim to help students to develop the passion and desire to apply the taught knowledge and skills outside of the classroom and undertake ICT study at a higher level. The modern world expects digital skills to be as important as English and Maths. Having both technical skills and knowledge of applying these skills in the working world will provide vast career opportunities in this field and inspire students to succeed.
Year 12 and 13	This course is for learners who are interested in an introduction to the study of creating IT systems to manage and share information alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in IT. Learners will develop a common core of IT knowledge and study areas such as the relationship between hardware and software that form an IT system, managing and processing data to support business and using IT to communicate and share information. The qualification will enable learners to progress to further study in the IT sector or other sectors and the opportunity to progress to a degree in an information technology discipline or a degree where information technology related skills and knowledge may be advantageous.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	IT Curriculum Implementation					
Year 7	NA	NA	NA	NA	NA	NA
Year 8	NA	NA	NA	NA	NA	NA
Year 9	A.1 Identify design principles used in two different types of user interface, with an example for each interface.

A.1 Identify ways that the user interfaces meet user needs, with one example for each interface. | A.1 Describe the design principles used in two different types of user interface, with some examples for each interface.

A.1 Describe ways that the user interfaces meet user needs, with some examples. | A.2 Explain how two different types of user interface meet design principles, with some relevant examples. | A.2 Explain how the user interfaces meet user needs, with some relevant examples | A.2 Analyse how two different types of user interface meet the design principles and user needs, with relevant detailed examples. | A.2 Assess how effectively two different types of user interface meet the design principles and user needs, with justified examples. |
| **Year 10** | B.1 Create a project plan for the design of a user interface that makes limited use of some project planning techniques.

B.1 Create an initial design that meets some user requirements but is limited in most aspects. | B.1 Create a project plan for the design of a user interface that makes some relevant use of project planning techniques.

B.1 Create an initial design that meets some user requirements. | B.2 Create an appropriate project plan for the design of a user interface that makes relevant use of project planning techniques. | B.2 Create a detailed initial design that shows how it meets most user requirements. | B.2 Create an appropriate project plan for the design of a user interface that makes effective use of project planning techniques and create a detailed and considered initial design that shows how it meets most user requirements. | B.2 Create an appropriate project plan for the design of a user interface that makes full and effective use of project planning techniques and create a comprehensive initial design that shows how it meets all user requirements. |
| **Year 11** | C.1 Use their plan to develop a user | C.1 Use their plan to develop and refine a | C.1 Describe strengths and | C.2 Use their plan to develop and refine an | C.2 Use their plan to develop and refine an | C.2 Use their plan to develop and refine an |

	interface that shows limited features and which does not take user feedback into account. C.1 Identify one strength and one weakness of both their user interface and project plan.	user interface that shows limited features, using feedback to make limited changes.	weaknesses of both their user interface and project plan, with some examples of each.	appropriate user interface, using feedback to make some changes. C.2 Explain the strengths and weaknesses of both their user interface and project plan, summarising decisions made.	effective user interface that shows most features and analyse the strengths and weaknesses of their user interface and project plan, discussing decisions made.	effective user interface that shows all features and assess the strengths and weaknesses of their user interface and project plan, justifying decisions made.
Year 12	**Unit 1: Information Systems** A1 Digital devices, their functions and use. A2 Peripheral devices and media A3 Computer software in an IT system. A4 Emerging technologies. A5 Choosing IT systems **Unit 2: Creating Systems to Manage Information** A3 Normalisation: The role of normalisation	**Unit 1: Information Systems** B1 Connectivity B2 Networks B3 Issues relating to transmission of data C1 Online systems C2 Online communities **Unit 2: Creating Systems to Manage Information** C1 Producing a database solution	**Unit 1: Information Systems** D1 Threats to data, information and systems. D2 Protecting data. **Unit 2: Creating Systems to Manage Information** D1 Database design evaluation	**Unit 1: Information Systems** E1 Online services E2 Impact on organisations E3 Using and manipulating data **Unit 2: Creating Systems to Manage Information** Mock exam reflection and improvement	**Unit 1: Information Systems** F1 Moral and ethical issues F2 Legal issues **Unit 2: Creating Systems to Manage Information** Mock exam reflection and improvement	**Unit 1: Information Systems** Practice Papers **Unit 2: Creating Systems to Manage Information** Mock exam reflection and improvement

	to develop efficient data structures A1 Relational database management systems A2 Manipulating data structures and data in relational databases B1 Relational database design B2 Design documentation:	C2 Testing and refining the database solution	D2 Evaluation of database testing D3 Evaluation of the database			
Year 13	**Unit 3: Using Social Media in Business** A1 Social media websites A2 Business uses of social media A3 Risks and issues	**Unit 3: Using Social Media in Business** B1 Social media planning processes B2 Business requirements B3 Content planning and publishing.	**Unit 3: Using Social Media in Business** B4 Developing an online community B5 Developing a social media policy B6 Reviewing and refining plans	**Unit 3: Using Social Media in Business** C1 Creating accounts and profiles C2 Content creation and publication C3 Implementation of online community building C4 Data gathering and analysis C5 Skills, knowledge and behaviours	**Unit 3: Using Social Media in Business** Assignment completion	**Unit 3: Using Social Media in Business** Assignment completion
	Unit 6: Website Development	**Unit 6: Website Development** Assignment 1	**Unit 6: Website Development** B1 Website design	**Unit 6: Website Development** C3 Website review	**Unit 6: Website Development** Assignment 2	**Unit 6: Website Development** Assignment 2

A1 Purpose and principles of website products A2 Factors affecting website performance		B2 Common tools and techniques used to produce websites C1 Client-side scripting languages C2 Website development	C4 Website optimisation C5 Skills, knowledge and behaviours		

Subject **Computer Science & IT KS4**	**FUNCTIONS OF ASSESSMENT**		
TIMESCALE **Annually**	Baseline Assessment testing on basic computational thinking, programming concepts, algorithms and flowcharts. This enables for a starting point for making early judgements and informing subsequent formative assessment. Data logged into departmental trackers to monitor attainment.	Years 9 and 10 students will sit a GCSE style CS paper for their End of Year Exam to measure progress and outcomes from their starting points. Year 11 students will have their Trial GCSE exams in December which are internally marked by class teachers.. Results in January with feedback forms. Year 11 students will have their GCSE exams in May/June which are externally marked by OCR. Results in August.	The IT /CS department produces analysis of examination results at KS4 to identify strengths and areas to improve on to inform teaching and intervention strategies. Results data/final outcome: Data is used to identify students not making adequate progress Verbal and written evaluation of exams and progress

			There are there components in IT: Comp1 and 2 controlled assessment/coursework, comp 3 external exam.	
	Interim Could be termly or half termly	End of unit assessments(8 units in Total) Peer and self-assessment on Google classroom and worksheets. Re-ACT written feedback and student response.	End of Unit assessments with ReACT written feedback and student response Updating of Department Trackers to monitor students after every unit. **Year 11** 8 unit assessments altogether 1 Trial examination in December 1 Trial examination in March Past Papers from January until May examination. From January all students receive personalised learning checklists (PLCs) for every examination paper they complete. IT - trial exam **Year 10** 6 unit assessments End of unit assessment Trial Examination in April IT - Complete comp 1&2 assignments and prep for comp 3. **Year 9** 4 unit assessments + Python Essentials End of unit assessment End of year assessment in July. IT - Prep comp1&2 and mock assignments	
	Weekly	Formative assessment strategies take place including the following strategies: ● Worksheets/Homework on Google Classroom ● Exam questions, mark schemes and model answers on Google Classroom ● Lesson Ready PowerPoints/video links and articles on Google Classroom		

| | Hourly | Lesson Outcomes are shared with students on PowerPoints- Google Classroom.

Every lesson the following formative assessment takes place using the following strategies:
- Python Challenges
- Direct and Targeted questioning
- Tiered questioning to clarify understanding using Bloom's Taxonomy

- Last lesson, last week, last year | |
|---|---|---|---|

		● Coursework where applicable all students to proofread their work (ReACT)	

Subject **Computer Science & IT KS5**		FUNCTIONS OF ASSESSMENT		
		FORMATIVE; The instructional guidance that identifies central points of learning and plans for the progression of individual students.	**SUMMATIVE;** This describes individuals learning at the end of an instructional unit by comparing it against a standard or benchmark. (High Stakes Assessment)	**EVALUATIVE;** This is about institutional accountability and comes after terminal exams.
TIMESCALE	**Annually**	Baseline testing for external Year 12 students

GCE Alps and trial exam data is used to make judgement for assessment

Year 13 public exams | Years 12 and 13 will sit an A- level style CS paper for their End of Year Exam to measure progress and outcomes from their starting points.

Year 13 will have their Trial exams which are internally marked. Results in January with feedback forms.

Year 13 will have their exams in May/June which are externally marked by OCR. Results in August. | The IT /CS department produces analysis of examination results at KS5 to identify strengths and areas to improve on to inform teaching and intervention strategies.

Feedback is given to students throughout the year based on their folder organisation and the quality of work submitted. |

		H446 (Coursework) will be carried out over 2 year and will be submitted to OCR for final marks by March/April.	ReAct is completed consistently to bridge any gaps. Data is used to identify students not making adequate progress.
Interim Could be termly or half termly	End of unit assessments(12 units in Total) Student PLC's for each topic used on Google classroom Peer and self-assessment on Google classroom and Worksheets Re-ACT written feedback and student response	End of Unit assessments with ReACT written feedback and student response Completion of subject progress trackers / personalised learning checklists (PLCs) Updating of Department Trackers to monitor students after every unit. **Year 12** 12 unit assessments altogether 1 Trial examination in December (2hr) 1 Trial examination in March (2hr) Past Papers from January until May examination. From January all students receive personalised learning checklists (PLCs) for every examination paper they complete. H446 Coursework (Analysis and Design) **Year 13** 12 unit assessments altogether 1 Trial examination in December (2hr 30) 1 Trial examination in March (2hr 30) Past Papers from January until May examination. From January all students receive personalised learning checklists (PLCs) for every examination paper they complete. H446 Coursework (Development, Testing and Evaluation) Year 12/13 IT BTEC Single award - 4 Units (2 exams and 2 coursework) double award - 8 Units (3 exams and 5 coursework)	
Weekly	Formative assessment strategies take place including the following strategies:		

		● Worksheets/Homework on Google Classroom ● Past Paper Exam questions, mark schemes and model answers on Google Classroom ● Lesson Ready PowerPoints/video links and articles on Google Classroom ● Coursework where applicable all students to proofread their work (ReACT)
	Hourly	Lesson Outcomes are shared with students on PowerPoints- Google Classroom. Every lesson the following formative assessment takes place using the following strategies: ● Python Challenges ● Direct and Targeted questioning ● Tiered questioning to clarify understanding using Bloom's Taxonomy. ● last lesson, last week; last year