Curriculum Intent Framework

Subject:	ICT and Computing
Subject Curriculum Vision:	The ICT and Computer Science curriculum at Bishops' aims to develops students' knowledge of technology in a way that they can independently adapt to an ever-changing technological landscape. The skills they will learn will be transferrable into other areas and throughout KS3 we develop and reinforce critical thinking and logic skills that extend into other subject areas and the wider world. Through knowledge-led development of students understanding basic computing principles and use of multiple software platforms students will gain a deeper knowledge of how technology impacts the world around us and are given the opportunity to explore different capabilities of technology as well as reinforcing the safe and ethical use of technologies to help our students become positive members of society.

Core Subject Values:

Dignity and Respect	From the start of KS3 students are given responsibility over their own learning and supported in building their talents and self-esteem within the subject. Looking at the wider world and wider community, students have topics that will help them understand how to build positive relationships when communicating with technology and appreciate the diversity that comes with access to technology. Through teamwork topics, students can utilize their teamwork skills and build on their idea of community and democracy through group decision making. There are opportunities throughout KS3 for students to understand how to use technology safely and respectfully whilst respecting other people's opinions and views.
Wisdom, Knowledge and Skills	Looking at how technology is used by different industries and people, students explore the wider world and are given the opportunity to consider the moral, ethical, and legal aspects of use of technology. Building on students' curiosity is part of project work and providing students with basic information to transform into unique programs or final pieces gives students the opportunity to flourish. Students are encouraged to question and explore learning in topics with time embedded into topics for tasks that will challenge all students and work through contextual scenarios to apply learning to real world contexts and therefore gain a deeper understanding. Through embedding independence and logical thinking, we aim to provide students with the tools to adapt to different technologies. Opportunities for teamwork provide students with teamwork experience and extended projects allow for students to develop their initiative and organization. The collaboration and problem-solving aspects of the curriculum aim to support whole person development for students.
Hope and Aspiration	Technology is ubiquitous in society, and we aim to enable students to use technology in a positive way and see how it can be used in a supportive role for many people. Looking at social, ethical, and moral use of technology we develop students' tolerance and understanding of others and address issues in a way that allows students to continue to be positive and active digital citizens. Through our schemes of learning and extra-curricular provision we want to feed students' ambitions and help them flourish through the opportunities they are given. Providing students with chances to see technology beyond the classroom and social aspects we aim to help students see the different options of future learning or employment within the technology sector and embed into the subject topics or challenges that provide a platform for students to celebrate their skills and apply this learning beyond the classroom.
Extra-curricular Provision	Enrichment activities within LIFE program at KS4 to develop wider technology skills and knowledge through iDEA award, Bronze at Year 10 and Silver at Year 11. Giving the opportunity for students to develop their awareness and understanding of technology in a range of contexts. and supporting their whole person development through a course that provides evidence on CV's or personal statements.

KS3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	**Using Computers Safely** Introduction to OneNote School Acceptable Use Policy Esafety	**Bebras** Logical thinking competition **Digital Storybooks** Microsoft PowerPoint	**Understanding Computers** Input and output devices Processing Storage Expansion Cards Software	**Algorithms** Writing algorithms Flowcharts Search and Sort algorithms	**Game Design using Scratch** Design process Programming skills	**Marketing** Microsoft Office skills Design software skills
Year 8	**Web Design** Serif Web Plus skills Planning	**Bebras** Logical thinking competition **Cyber Security** Phishing Viruses Copyright Protecting Personal Data	**Networks** Wired and Wireless networks Network hardware Internet Internet of things	**Understanding Computers** Input and output devices Processing Storage Expansion Cards Software	**Programming** Python Programming Language Writing algorithms Mathematical operators Comparison operators Sequence and selection	**Animation** Planning Implementation Review
Year 9	**Data Representation** Images Sound Characters Binary	**Bebras** Logical thinking competition **Data Modelling** Creating financial models Conditional formatting Macros and Charts	**Programming** Python Programming Language Writing algorithms Recap of Year 8 Iteration	**Introduction to GCSEPod** Registering Accessing Pods Making Playlists Retrieval practice and GCSEPod	**Ethical, legal, cultural, and environmental issues** Driverless cars Cyberbullying and digital divide Environmental impact Legal issues	**Cyber explorers** Registering Cyber security principled in a range of career contexts

KS4- GCSE Computer Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	1.2 Memory and Storage	2.1 Algorithms 1.1 Systems Architecture	2.2 Programming Techniques	2.2 Programming Techniques	2.2 Programming Techniques	2.2 Programming Techniques
Year 11	2.4 Boolean Logic 2.5 Programming Languages and IDEs	2.3 Producing Robust Programs Paper 2 exam technique	Paper 2 retrieval skills Paper 2 past paper questions	Paper 2 retrieval skills Paper 2 past paper questions	Retrieval skills Past paper walkthroughs Past paper questions	

KS4- Year 10 WJEC IT (2022 onwards)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	**Databases** Introduction to Relational databases Tables Validation and data types **Spreadsheets**	**Databases** Queries Reports Forms **Spreadsheets**	**Databases** Retrieval skills Project walkthrough **Spreadsheets**	**1.1.1 Functionality of different hardware devices** **1.1.2 Functionality of different software** **1.2.1 Why data must be fit for purpose** **1.2.2 How input data is checked for errors**	**1.1.3 Services provided by IT** **1.2.3 How data transfers over different types of network** **1.2.4 Different types of connectivity**	**Unit 2 coursework**
Year 11	**Unit 2 coursework**	**Unit 2 coursework**	**1.3.1 Risks to information held on computers** **1.3.2 The impact of data loss, theft or manipulation on individuals and businesses** **1.3.4 How moral and ethical issues affect computer users** **1.3.5 How legal issues protect computer users**	**1.3.3 Methods used to protect information** **1.3.6 The cultural, personal and environmental impact of ICT** **1.3.7 How a digital footprint can impact computer users**	**Unit 1 revision** Retrieval skills Practice exam questions	

KS5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	**Unit 2- Using Databases to manage information** **Unit 3- Social media in business**	**Unit 2- Using Databases to manage information** **Unit 3- Social media in business**	**Unit 2- Using Databases to manage information** **Unit 3- Social media in business**	**Unit 2- Using Databases to manage information** **Unit 3- Social media in business**	**Unit 2 Assessment** **Unit 3- Social media in business** **Unit 1- Information Technology Systems**	**Unit 1- Information Technology Systems**
Year 13	**Unit 1- Information Technology Systems** **Unit 6- Web Development** Learning Aim A content Learning Aim A assignment	**Unit 1- Information Technology Systems** **Unit 6- Web Development** Learning Aim A resubmission Learning Aim B&C content	**Unit 1- Information Technology Systems** Assessment **Unit 6- Web Development** Learning Aim B&C assignment	**Unit 2 - Using Databases to manage information** recap **Unit 6- Web Development** Learning Aim B&C resubmission	**Unit 2 - Using Databases to manage information** recap **Unit 2 resit Assessment**	