

COMPUTER SCIENCE – CURRICULUM INTENT

ASPIRE – CHALLENGE – ACHIEVE

Computer Studies is the study of processes that interact with data and can be represented in the form of programs. It enables the use of algorithms to manipulate, store and communicate digital information. Information technology is the use of computers to store, retrieve, transmit and manipulate data or information.

The Computer Studies Department strives to develop a passion in all students so they aspire to become confident with their use of technology. All of our students are encouraged to become independent learners and will have the opportunity to learn concepts and principles from Computer Science and ICT as set out in the National Curriculum. Our curriculum provides opportunities to focus on the fundamental principles and concepts of Computer Science and ICT including abstraction, logic, algorithms and data representation. Students should be able to analyse problems in computational terms and have repeated practical experience of writing computer programs to solve such problems independently. Literacy is a key aspect of the curriculum and students are encouraged to develop their use of key vocabulary through a variety of class based and home based activities.

Technology advances constantly and people are always working on new and inventive processes so the Computer Studies department constantly reviews its curriculum to stay innovative and relevant. By studying Computer Science & ICT students will be able to evaluate and apply information technology, including new or unfamiliar technologies and solve problems analytically. We aim to foster independence, curiosity and thinking skills in all our learners preparing them to learn how to look at a problem and work out a way a computer might be able to solve it.

COMPUTER SCIENCE – CURRICULUM MAP

Key = Matching colours denote links between topics either in content or skills across Key Stages

7	UCSER	OFFICE SKILLS	SCRATCH	PYTHON	EXCEL	ACCESS
8	COMPUTER CRIME	UNDERSTANDING COMPUTERS	GRAPHICS	PYTHON	EXCEL	ACCESS
9	HTML	GRAPHICS & PROJECT MANAGEMENT	EXCEL	EXCEL	COMPUTER NETWORKS	USER INTERACES
10	THE USER INTERFACE	PROJECT PLANNING TECHNIQUES	CREATING A USER INTERFACE	COLLECTING, PRESENTING & INTEPRETATING DATA		
11	COMMUNICATION TECHNOLOGIES & CLOUD STORAGE	CYBER SECURITY	LEGISLATION AND COLLECTING DATA	COLLECTING, PRESENTING & INTEPRETATING DATA		