EPCHS Computing Department: Year 10 Computer Science Programme of Study

Our intent is for pupils to understand and apply the fundamental concepts and principles of Computer Science. To be able to analyse problems in computational terms through practical problem-solving experience. Enable learners to think creatively, innovatively, analytically, logically and critically. Understand the components that make up digital systems and how they communicate with one another. Understand the impacts of digital technology to the individual and wider society. Apply mathematical skills relevant to Computer Science.

Year/Term	Unit of Work	Intent
Autumn	1.1 system Architecture	To introduce the concept of a computer system and its component parts and understand the link between hardware and software
	1.2 Memory and Storage	To understand the role of specific hardware devices and the operation of a computer system.
Spring	1.3 Networks & Topologies	To understand the use of wired and wireless networks in modern communication. To understand how data packets are transmitted between electronic devices and how they are encoded to enable their delivery.
	1.4 Network Security	To understand the importance of keeping data safe from malicious intent, in identifying the risks and applying methods to protect it.
Summer	1.5 System Software	To understand the purpose of functionality of Operating Systems and Utility Software
	1.6 Ethical, legal, cultural and environmental impacts of digital technology	To explore the wider implications of the use of computers in the modern world.