



## Computer Science Curriculum Overview - Year 10

	Unit	Details
Autumn One	<b>Fundamentals of Computer Networks</b>	Students begin to explore the makeup of physical computer networks starting at LAN size before moving to larger Wide Area Networks. This includes analysis of network design and how data is transmitted between devices securely.
Autumn Two	<b>Cyber Security</b>	This exciting topic explores the fundamentals of cyber security exploring key areas such as social engineers, penetration testing, malicious code and methods to detect and prevent cyber security attacks,
Spring One	<b>Relational databases and SQL</b>	In this topic pupils begin to examine how data is securely stored in a manner which is accessible through structure queries.
Spring Two	<b>Fundamentals of Python (Intermediate level)</b>	Our intermediate Python course begins to explore Python in greater detail and focuses on the more advance features of GCSE python including SQL, Functions and Lists.
Summer One	<b>Intermediate Programming Project</b>	The intermediate programming project combines pupil's experiences across year 9 and 10 into a programming challenge. This serves to push students experiences beyond the GCSE curriculum through the implementation of A Level concepts such as UI as well as securing the knowledge and skills required at GCSE
Summer Two		