

Curriculum Area - IT

Overview 2021/22

The skills and knowledge being taught in each half term for each year group.

| | HT1 | HT2 | HT3 | HT4 | HT5 | HT6 |
|-------------------------------|--|--|---|---|--|---|
| Year 10 – Computer Science | <p>Computer Systems In this AP we will be looking at the different types of computer systems which are used by individuals, organisations, and business. We also look at the different types of memory in a computer system and compare the difference between memory and storage devices. There is also a review and comparison of the different types of storage devices.</p> | <p>Data representation In this unit of work, we look at the way in which data is represented in a computer system. This involves understanding binary, binary addition and understanding hexadecimal. Students will also study the way in which text, sound and images are represented.</p> | <p>Algorithms Students develop a firm understanding of algorithms. We also compare pseudo code and flow chart.</p> | <p>Networks In this unit of work, we will study the importance of computer networks. We look at network devices, security and dangers. We also compare LAN, WAN and PAN.</p> | <p>Network Typologies In this unit of work, we follow on from AP4 and discuss the way networks are structured. We look at a range of different topologies as well as factors which effect a networks performance.</p> | <p>Cyber Security In this unit we look at a range of different cyber security threats which could attack a business, individual or organisation. We also look at a range of different malware.</p> |
| Year 11 – Computer Science | <p>System Software Boolean logic</p> | <p>Ethical, legal, cultural and environmental impacts of digital technology</p> | <p>Programming languages and Integrated Development Environments</p> | <p>Exam preparation</p> | <p>Exam preparation</p> | |