



Curriculum Plan Key Stage 4

Computer Science

Academic year: 2020/21		Head of department: David Chattell (d.chattell@todhigh.co.uk)	
Term 1			
Year 10		Year 11	
2.4.1 Boolean logic 1.2.3 Units 1.2.4 Data storage – Numbers 1.2.4 Data storage - Sound 1.2.4 Data storage - Images 1.2.4 Data storage – Characters 1.2.5 Data storage – Compression 2.1.2 Designing, creating and refining algorithms Practical Programming.		1.4.1 Threats to computer systems and networks 1.5.1 Operating systems 2.3.1 Defensive design 2.3.2 Testing 1.5.2 Utility software 1.6.1 Ethical, legal, cultural and environmental impact 2.5.1 Languages 2.5.2 The Integrated Development Environment (IDE)	
Term 2			
Year 10		Year 11	
1.1.1 Architecture of the CPU 2.2.1 Programming fundamentals 2.2.2 Data types 1.1.2 CPU Performance 1.1.3 Embedded systems 1.2.1 Primary storage (Memory) 1.2.2 Secondary storage 2.2.3 Additional programming techniques		Programming Revision 2.1.3 Searching and sorting algorithms <i>Searching and Sorting Practical Programming skills</i> Practical Programming Skills Revision	
Term 3			
Year 10		Year 11	
1.3.1 Networks and topologies 1.3.2 Wired and wireless networks, protocols and layers Practical Programming Skills Mock Exam Revision		Exam Preparation	

Homework/revision	
Year 10	Year 11
Homework will be set in accordance with the timetable and set through paper based exam questions to research and answer. In addition alternative homework will be set through Seneca. All homework preparation will be based on the requirements of the exam.	Homework will be set in accordance with the timetable and set through paper based exam questions to research and answer. In addition alternative homework will be set through Seneca. All homework preparation will be based on the requirements of the exam.
Assessment	
Year 10	Year 11
Students complete a formal written assessment at the end of each unit. They will cover all the work that they have covered to that date. This is a written paper and will be completed in exam conditions.	Students complete a formal written assessment at the end of each unit. They will cover all the work that they have covered to that date. This is a written paper and will be completed in exam conditions.

How can parents and carers help?	
Year 10	Year 11
Students will have a knowledge organiser, please help them revise and test them thoroughly.	Students will have a knowledge organiser, please help them revise and test them thoroughly.