

<i>Department information</i>		
Subject Leaders: Mr Morris (KS3), Mr Tracey (KS4) & Mr Dudley (KS5)		
Exam board: Eduqas		
Computer Science is part of the Business and Computing Faculty. In KS3 students have 2 lessons a fortnight. In KS4 they have 5 lessons a fortnight. In KS5 they have 10 lessons a fortnight		
<i>What is the purpose of Computer Science?</i>		
It is our intent to provide a meaningful curriculum for all students but particularly those who have social disadvantage and SEND. We aim to inspire computational thinkers through a relevant, engaging and purposeful curriculum which encourages students to develop skills beyond the classroom. Offer a varied mix of theoretical and practical based learning which embeds problem solving at its core. Encourage pupils to develop a passion for computing so pupils are self-motivated and independent learners who see the potential that studying computing can offer.		
	<i>Key Content/Topics</i>	<i>How do we assess student progress?</i>
7	<ul style="list-style-type: none"> ○ Algorithms ○ Introduction to coding ○ How Computers Work 1 ○ Physical computing / Microbit Robots ○ Iteration 	<p>In addition to ongoing in-class live assessment and feedback there will be 5 classroom assessments that will take place throughout the year at the end of each unit.</p> <p>There is a larger assessment End of Year assessment in June</p>
8	<ul style="list-style-type: none"> ○ How Computers Work 2 ○ Year 7 Coding ○ Digital graphics (Photoshop skills) ○ Photoshop project (Research, Legislation, Evaluation) ○ Game design (PyGame) 	<p>In addition to ongoing in-class live assessment and feedback there will be 5 classroom assessments that will take place throughout the year at the end of each unit.</p> <p>There is a larger assessment End of Year assessment in June</p>
9	<ul style="list-style-type: none"> ○ How Computers Work 2 ○ Year 7 Coding Recap ○ Further Coding ○ Cybersecurity and Networks ○ Logic (Truth tables / Flowol / Notation) Flash Animation 	<p>In addition to ongoing in-class live assessment and feedback there will be 5 classroom assessments will take place throughout the year at the end of each unit.</p> <p>There is a larger assessment End of Year assessment in June</p>
10	<ul style="list-style-type: none"> ○ Programming in Python ○ Legislation and Impacts ○ Operating Systems 	<p>In addition to ongoing in-class live assessment and feedback there will be 6 classroom assessments will take place throughout the year at the end of each unit.</p>

	<ul style="list-style-type: none"> ○ Network and Data Security ○ Principles of Programming and Data Organisation ○ GUI programming 	<p>There is a larger assessment End of Year assessment in June.</p>
<p>11</p>	<p>Revision/Recap/Exam Practice on the following topics:</p> <ul style="list-style-type: none"> ○ Hardware ○ Logic ○ Data Representation and Storage ○ Component 2 coding ○ Networks and Security ○ Software Development ○ Principles of Programming ○ Program Construction ○ Data Organisation ○ Impacts and Legislation ○ Algorithms and Constructs ○ Operating Systems 	<p>In addition to ongoing in-class live assessment and feedback there will be 6 formal classroom assessments will take place throughout the year at the end of each unit and 2 Trial Exams.</p>
<p>12</p>	<ul style="list-style-type: none"> ○ Organisation and Structure of Data ○ Databases and Distributed Systems ○ System Analysis ○ Algorithms and Programs ○ Programming Concepts ○ Programming Project ○ Logical Operators ○ Data Structures 	<p>In addition to ongoing in-class live assessment and feedback there will be 8 formal classroom assessments that will take place throughout the year and one trial exam at the end of the year.</p> <p>The programming project takes 70 hours and is worth 20%.</p>
<p>13</p>	<ul style="list-style-type: none"> ○ Principles of Programming ○ System Design ○ Software Engineering ○ Program Construction ○ Law and Ethics ○ Architecture 	<p>7 assessments will take place throughout the year. There will be two trial exams.</p>

The Curriculum at Arthur Terry

Computer Science

	<ul style="list-style-type: none">○ Hardware○ Data Transmission○ Data Representation○ Operating Systems○ Types of Software○ Data Security and Integrity	
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Curriculum Adaptations due to Covid lockdowns

- Gaps in Computer Science knowledge for Year 8 students due to the implications of lockdown will be taught and recapped in Year 9.
- Topics for Year 12 and 13 were adapted depending on timings. Awaiting news on changes ahead of for next year.
- This is the same for Year 11 where some topics were not taught in Year 10.