

1	<b><u>Paper 1 topics for this half-term:</u></b>
2	<ul style="list-style-type: none"> <li>● Recursive techniques</li> </ul>
3	<ul style="list-style-type: none"> <li>● Object oriented programming</li> </ul>
4	<ul style="list-style-type: none"> <li>● Implementing stacks and queues</li> </ul>
5	<b><u>Paper 1 assessments this half-term:</u></b>
6	<ul style="list-style-type: none"> <li>● Paper 1 assessment 1 - recursive techniques and OOP</li> </ul>
7	<b><u>Paper 2 topics fo this half-term:</u></b>
8	<ul style="list-style-type: none"> <li>● Revision of number systems, bases and binary</li> <li>● Revision of data representation</li> <li>● Hardware and software</li> <li>● High and low level languages</li> <li>● Translators</li> <li>● Boolean algebra and truth tables</li> <li>● Internal and external hardware</li> </ul>
	<b><u>Paper 2 assessments this half-term:</u></b>
	<ul style="list-style-type: none"> <li>● Paper 2 assessment 1 - data representation</li> <li>● Paper 2 assessment 2 - all topics covered in the term</li> </ul>
Mid Term Break	
9	<b><u>Paper 1 topics for this half-term:</u></b>
10	<ul style="list-style-type: none"> <li>● More on implementing stacks</li> </ul>
11	<ul style="list-style-type: none"> <li>● Implementing graphs</li> </ul>
12	<ul style="list-style-type: none"> <li>● Implementing binary search trees</li> </ul>
13	<ul style="list-style-type: none"> <li>● Implementing hash tables</li> </ul>
14	<ul style="list-style-type: none"> <li>● Dictionaries</li> </ul>
15	<ul style="list-style-type: none"> <li>● Vectors</li> <li>● Graph traversal</li> <li>● Tree traversal</li> <li>● Reverse polish</li> </ul>
16	<b><u>Paper 1 assessments this half-term:</u></b>
	<ul style="list-style-type: none"> <li>● Paper 1 assessment 2 - abstract data types</li> </ul>
	<b><u>Paper 2 topics fo this half-term:</u></b>
	<ul style="list-style-type: none"> <li>● More on architecture and assembly language</li> <li>● More on consequences of computing</li> </ul>
	<b><u>Paper 2 assessments this half-term:</u></b>
	<ul style="list-style-type: none"> <li>● Paper 2 assessment 3 - computer architecture and organisation</li> <li>● Paper 2 assessment 4 - consequences of computing</li> </ul>
Christmas & New Year Break	
17	<b><u>Paper 1 topics for this half-term:</u></b>
18	<ul style="list-style-type: none"> <li>● Work on skeleton program</li> </ul>
19	<b><u>Paper 1 assessments this half-term:</u></b>
20	<ul style="list-style-type: none"> <li>● Paper 1 assessment 3 - hand tracing with abstract data types</li> </ul>

21	<ul style="list-style-type: none"> <li>● Paper 1 assessment 4 - section C questions</li> </ul>
22	<p><b><u>Paper 2 topics for this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Networking</li> <li>● The Internet</li> <li>● More on Databases</li> </ul> <p><b><u>Paper 2 assessments this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Paper 2 assessment 5 - Networking</li> </ul>
Mid Term Break	
23	<p><b><u>Paper 1 topics for this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Theory of computation revision</li> </ul>
24	<ul style="list-style-type: none"> <li>● Final push with NEA</li> </ul>
25	<p><b><u>Paper 1 assessments this half-term:</u></b></p>
26	<ul style="list-style-type: none"> <li>● Paper 1 assessment 4 - Section A</li> </ul>
27	<p><b><u>Paper 2 topics for this half-term:</u></b></p>
28	<ul style="list-style-type: none"> <li>● Completion of databases</li> <li>● Big data</li> </ul>
29	<ul style="list-style-type: none"> <li>● Functional programming</li> <li>● Missing links</li> </ul> <p><b><u>Paper 2 assessments this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Paper 2 assessment 6 - Databases, big data and functional programming</li> </ul>
Easter Break	
30	<p><b><u>Paper 1 topics for this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● More complex data structures including hash tables and stacks</li> <li>● Classification of algorithms</li> </ul>
31	
32	<p><b><u>Paper 1 assessments this half-term:</u></b></p>
33	<ul style="list-style-type: none"> <li>● Paper 1 assessment 5 - finite state machines</li> <li>● Paper 1 assessment 6 - AS paper 1 mock section A only</li> </ul> <p><b><u>Paper 2 topics for this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Revision of all topics covered so far</li> </ul> <p><b><u>Paper 2 assessments this half-term:</u></b></p> <ul style="list-style-type: none"> <li>● Paper 2 assessment 5 - databases</li> <li>● Paper 2 assessment 6 - AS paper 2 mock full paper</li> </ul>
Mid Term Break	
34	<ul style="list-style-type: none"> <li>● Final revision and NEA submission/feedback of marks</li> </ul>
35	
36	
37	

## Course Information

<p><b><u>Course Structure</u></b></p>	<p>The course is assessed through two exams and coursework (NEA).            Paper 1 is worth 40%            Paper 2 is worth 40%            NEA is worth 20%            You will hand your coursework in before the Easter break in year 13.            You will sit both papers at the end of year 13.            Paper 1 is a programming paper that you will do using a computer.            Paper 2 is a written paper.</p>													
<p><b><u>Assessment</u></b></p>	<p>You will be assessed at 6 points throughout the year for both papers. The assessments will be formed of past exam-style content and will be graded with A level grades. Each assessment will be mostly focussed on the topic you have been studying; however, some of the questions will be interleaved (questions from other topics) making it vital that you always revisit topics over and over again.</p>													
<p><b><u>Feedback</u></b></p>	<ol style="list-style-type: none"> <li>1. You complete the assessment</li> <li>2. Your teacher will mark the work, giving you strengths that reinforce the positives in your work and targets that directly show you how to improve.</li> <li>3. Your work will be returned to you and you will fill in a STAR Reflection sheet to help you engage with the feedback and identify how you will improve for next time</li> <li>4. After reading the detailed feedback your teacher has provided you with, you will improve a part of your work using a purple pen.</li> <li>5. Your assessments will be placed into assessment folders for the subject</li> </ol>													
<p><b><u>Assessment Objectives</u></b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 70%;"><b><u>How do I demonstrate this in my work</u></b></th> <th style="width: 20%;"><b><u>Overall weighting</u></b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b><u>AO1</u></b></td> <td>Demonstrate knowledge and understanding of the principle concepts of computer science, including abstraction, logic, algorithms and data representation. This is largely tested in paper 2 and a little in paper 1.</td> <td style="text-align: center;">30%</td> </tr> <tr> <td style="text-align: center;"><b><u>AO2</u></b></td> <td>Apply knowledge and understanding of the principles and concepts of computer science, including to analyse problems in computational terms. This is tested in both papers and a little in the NEA.</td> <td style="text-align: center;">30%</td> </tr> <tr> <td style="text-align: center;"><b><u>AO3</u></b></td> <td>Design, program and evaluate computer systems that solve problems, making reasoned judgements about these and presenting conclusions. This is tested largely in paper 1 and the NEA and a little in paper 2.</td> <td style="text-align: center;">40%</td> </tr> </tbody> </table>			<b><u>How do I demonstrate this in my work</u></b>	<b><u>Overall weighting</u></b>	<b><u>AO1</u></b>	Demonstrate knowledge and understanding of the principle concepts of computer science, including abstraction, logic, algorithms and data representation. This is largely tested in paper 2 and a little in paper 1.	30%	<b><u>AO2</u></b>	Apply knowledge and understanding of the principles and concepts of computer science, including to analyse problems in computational terms. This is tested in both papers and a little in the NEA.	30%	<b><u>AO3</u></b>	Design, program and evaluate computer systems that solve problems, making reasoned judgements about these and presenting conclusions. This is tested largely in paper 1 and the NEA and a little in paper 2.	40%
	<b><u>How do I demonstrate this in my work</u></b>	<b><u>Overall weighting</u></b>												
<b><u>AO1</u></b>	Demonstrate knowledge and understanding of the principle concepts of computer science, including abstraction, logic, algorithms and data representation. This is largely tested in paper 2 and a little in paper 1.	30%												
<b><u>AO2</u></b>	Apply knowledge and understanding of the principles and concepts of computer science, including to analyse problems in computational terms. This is tested in both papers and a little in the NEA.	30%												
<b><u>AO3</u></b>	Design, program and evaluate computer systems that solve problems, making reasoned judgements about these and presenting conclusions. This is tested largely in paper 1 and the NEA and a little in paper 2.	40%												
<p><b><u>Study Materials</u></b></p>	<ul style="list-style-type: none"> <li>● Knowledge Organisers</li> <li>● Course companions available through the college.</li> <li>● Google Classroom</li> <li>● Craig 'n' Dave YouTube channel</li> <li>● AQA specification, past papers and bank of exam questions</li> <li>● Resources written by the team</li> </ul>													
<p><b><u>Class Work</u></b></p>	<p>You will need to provide a ring binder to keep your notes in.            You will be given dividers with lists of all the topics for each section of the course.            Your folders will be checked regularly to make sure you are making good quality notes and that your work is well organised.</p>													