1	**Paper 1 topics for this half-term:**
2	● **Programming basics**
	● **Implementing searching and sorting algorithms**
3	● **Introduction to Data structures**
4	**Paper 1 assessments this half-term:**
5	● **Paper 1 assessment 1 - simple hand tracing**
6	**Paper 2 topics fo this half-term:**
	● **Number systems**
7	● **Number bases**
	● **Units**
8	● **Binary**
	● **Coding systems**
	● **Representation of data**
	● **Compression**
	● **Encryption**
	● **System software**
	Paper 2 assessments this half-term:
	• **Paper 2 assessment 1 - representation of data**

Mid Term Break

9	**Paper 1 topics for this half-term:**
10	● **More complex data structures**
	● **More complex algorithms**
11	**Paper 1 assessments this half-term:**
12	● **Paper 1 assessment 2 -complex hand tracing**
13	● **Paper 1 assessment 3 - trees**
14	**Paper 2 topics fo this half-term:**
15	● **Classification of languages**
	● **Logic gates**
16	● **Boolean algebra**
	● **Internal hardware**
	● **Assembly language**
	● **External hardware**
	● **Consequences of using computers**
	Paper 2 assessments this half-term:
	• **Paper 2 assessment 2 - fundamentals of computer systems**
	● **Paper 2 assessment 3 - topics from this half term**

Christmas & New Year Break

17	
18	**Paper 1 topics for this half-term:**
	● **More complex data structures including records**
19	● **Recursive techniques**
	● **More complex algorithms including merge sort.**
20	● **Abstraction and automation**

21	

22	**Paper 1 assessments this half-term:**
	   ● **Paper 1 assessment 4 - records**
	
	Paper 2 topics fo this half-term:
	   ● **Communication**
	   ● **Networking**
	
	Paper 2 assessments this half-term:
	   ● **Paper 2 assessment 4 - networking**

	Mid Term Break
23	**Paper 1 topics for this half-term:**
24	● **Theory of computation** ● **Regular languages**
25	● **Context free languages**
26	**Paper 1 assessments this half-term:**
27	● **None this half term**
28	**Paper 2 topics fo this half-term:**

29	● **Databases**
	   ● **SQL**
	
	Paper 2 assessments this half-term:
	   ● **None this half term**

	Easter Break
30	**Paper 1 topics for this half-term:**
31	● **More complex data structures including hash tables and stacks** ● **Classification of algorithms**
32	**Paper 1 assessments this half-term:**

33	● **Paper 1 assessment 5 - finite state machines**
	   ● **Paper 1 assessment 6 - AS paper 1 mock section A only**
	
	Paper 2 topics fo this half-term:
	   ● **Revision of all topics covered so far**
	
	Paper 2 assessments this half-term:
	   ● **Paper 2 assessment 5 - databases**
	   ● **Paper 2 assessment 6 - AS paper 2 mock full paper**

	Mid Term Break
34	
35	**NEA** ● **Intro to Tkinter and sqlite3**
36	● **Decide on a project** ● **Complete Analysis section of NEA**
37	

Course Structure	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.
Assessment	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.
Feedback	1. You complete the assessment 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. 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 4. After reading the detailed feedback your teacher has provided you with, you will improve a part of your work using a purple pen. 5. Your assessments will be placed into assessment folders for the subject
Assessment Objectives	

	How do I demonstrate this in my work	Overall weighting
AO1	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%
AO2	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%
AO3	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%

Study Materials	● Knowledge Organisers ● Course companions available through the college. ● Google Classroom ● Craig 'n' Dave YouTube channel ● AQA specification, past papers and bank of exam questions ● Resources written by the team
Class Work	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.