

CAMPUS CALENDAR 2021-22

Faculty of Business, Computer Science and ICT - KS5 computer science - Year 12

23 Aug - 27 Aug	1	<p><u>Paper 1 topics for this half-term:</u></p> <ul style="list-style-type: none"> ● Programming basics ● Implementing searching and sorting algorithms ● Introduction to Data structures <p><u>Paper 1 assessments this half-term:</u></p> <ul style="list-style-type: none"> ● Paper 1 assessment 1 - simple hand tracing <p><u>Paper 2 topics fo this half-term:</u></p> <ul style="list-style-type: none"> ● Number systems ● Number bases ● Units ● Binary ● Coding systems ● Representation of data ● Compression ● Encryption ● System software <p><u>Paper 2 assessments this half-term:</u></p> <ul style="list-style-type: none"> ● Paper 2 assessment 1 - representation of data
30 Aug - 03 Sept	2	
06 Sept - 10 Sept	3	
13 Sept - 17 Sept	4	
20 Sept - 24 Sept	5	
27 Sept - 01 Oct	6	
04 Oct - 08 Oct	7	
11 Oct - 15 Oct	8	
18 Oct - 22 Oct		Mid Term Break
25 Oct - 29 Oct	9	<p><u>Paper 1 topics for this half-term:</u></p> <ul style="list-style-type: none"> ● More complex data structures ● More complex algorithms <p><u>Paper 1 assessments this half-term:</u></p> <ul style="list-style-type: none"> ● Paper 1 assessment 2 -complex hand tracing ● Paper 1 assessment 3 - trees <p><u>Paper 2 topics fo this half-term:</u></p> <ul style="list-style-type: none"> ● Classification of languages ● Logic gates ● Boolean algebra ● Internal hardware ● Assembly language ● External hardware ● Consequences of using computers <p><u>Paper 2 assessments this half-term:</u></p> <ul style="list-style-type: none"> ● Paper 2 assessment 2 - fundamentals of computer systems ● Paper 2 assessment 3 - topics from this half term
01 Nov - 05 Nov	10	
08 Nov - 12 Nov	11	
15 Nov - 19 Nov	12	
22 Nov - 26 Nov	13	
29 Nov - 03 Dec	14	
06 Dec - 10 Dec	15	
13 Dec - 17 Dec	16	
20 Dec - 24 Dec	17 a	Christmas & New Year Break
27 Dec - 31 Dec		
03 Jan - 07 Jan	17 b	<p><u>Paper 1 topics for this half-term:</u></p> <ul style="list-style-type: none"> ● More complex data structures including records ● Recursive techniques ● More complex algorithms including merge sort. ● Abstraction and automation
10 Jan - 14 Jan	18	
17 Jan - 21 Jan	19	

24 Jan - 28 Jan	20	
31 Jan - 04 Feb	21	<u>Paper 1 assessments this half-term:</u>
		<ul style="list-style-type: none"> ● Paper 1 assessment 4 - records
07 Feb - 11 Feb	22	<u>Paper 2 topics fo this half-term:</u>
		<ul style="list-style-type: none"> ● Communication ● Networking
		<u>Paper 2 assessments this half-term:</u>
		<ul style="list-style-type: none"> ● Paper 2 assessment 4 - networking
14 Feb - 18 Feb		Mid Term Break
21 Feb - 25 Feb	23	<u>Paper 1 topics for this half-term:</u>
28 Feb - 04 Mar	24	<ul style="list-style-type: none"> ● Theory of computation ● Regular languages ● Context free languages
07 Mar - 11 Mar	25	
14 Mar - 18 Mar	26	<u>Paper 1 assessments this half-term:</u>
21 Mar - 25 Mar	27	<ul style="list-style-type: none"> ● None this half term
28 Mar - 01 Apr	28	<u>Paper 2 topics fo this half-term:</u>
		<ul style="list-style-type: none"> ● Databases ● SQL
04 Apr - 08 Apr	29	<u>Paper 2 assessments this half-term:</u>
		<ul style="list-style-type: none"> ● None this half term
11 Apr - 15 Apr		Easter Break
18 Apr - 22 Apr		
25 Apr - 29 Apr	30	<u>Paper 1 topics for this half-term:</u>
02 May - 06 May	31	<ul style="list-style-type: none"> ● More complex data structures including hash tables and stacks ● Classification of algorithms
09 May - 13 May	32	
16 May - 20 May	33	<u>Paper 1 assessments this half-term:</u>
		<ul style="list-style-type: none"> ● Paper 1 assessment 5 - finite state machines ● Paper 1 assessment 6 - AS paper 1 mock section A only
23 May - 27 May	34	<u>Paper 2 topics fo this half-term:</u>
		<ul style="list-style-type: none"> ● Revision of all topics covered so far
		<u>Paper 2 assessments this half-term:</u>
		<ul style="list-style-type: none"> ● Paper 2 assessment 5 - databases ● Paper 2 assessment 6 - AS paper 2 mock full paper
30 May - 03 June		Mid Term Break
06 June - 10 June	35	<u>NEA</u>
13 June - 17 June	36	<ul style="list-style-type: none"> ● Intro to Tkinter and sqlite3 ● Decide on a project ● Complete Analysis section of NEA
20 June - 24 June	37	
27 June - 01 July	38	

Course Information

<u>Course Structure</u>	<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>													
<u>Assessment</u>	<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>													
<u>Feedback</u>	<ol style="list-style-type: none"> 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 													
<u>Assessment Objectives</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 70%;"><u>How do I demonstrate this in my work</u></th> <th style="width: 20%;"><u>Overall weighting</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><u>AO1</u></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;"><u>AO2</u></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;"><u>AO3</u></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>			<u>How do I demonstrate this in my work</u>	<u>Overall weighting</u>	<u>AO1</u>	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%	<u>AO2</u>	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%	<u>AO3</u>	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%
	<u>How do I demonstrate this in my work</u>	<u>Overall weighting</u>												
<u>AO1</u>	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%												
<u>AO2</u>	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%												
<u>AO3</u>	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%												
<u>Study Materials</u>	<ul style="list-style-type: none"> ● 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 													
<u>Class Work</u>	<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>													