

Lesson number	Unit	Lesson name
2	Unit 4	Course intro. Getting started.
3	Unit 4	Datatypes, variables, constants, assignment
6	Unit 4	Arithmetic operations, operator precedence
7	Unit 4	Arithmetic operations, operator precedence
8	Unit 4	Strings, user input, string operations
9	Unit 4	Strings, user input, string operations
10	Unit 4	Booleans & Selection: If, else, if else
13	Unit 4	Selection: If, else, if else
14	Unit 4	Iteration: While loops
15	Unit 4	Iteration: For loops
16	Unit 4	Iteration: Exercises
17	Unit 4	Arrays: Define, basic operations
20	Unit 4	Arrays: Looping, totalling, counting, average/max/min etc
21	Unit 4	Arrays: Exercises
22	Unit 4	Arrays: Exercises
23	Unit 4	Test review
25	Unit 4	Java programming test
26	Unit 4	Functions
27	Unit 4	Functions
28	Unit 4	Functions
29	Unit 4	Thinking procedurally, logically, concurrently, ahead, abstractly
31	Unit 4	Program design: Introducing pseudo code, flow charts, trace tables
32	Unit 4	Program design: Pseudo exercises
33	Unit 4	Program design: Flow chart exercises
34	Unit 4	Program design: Trace table exercises
35	Unit 4	Program design: Scenario exercise: Pseudo, trace, Java
38	Unit 4	Program design: Scenario exercise: Flowchart, trace, Java
39	Unit 4	Standard algorithms: Sequential & binary search
Term holiday		
40	Unit 4	Standard algorithms: Search practice
41	Unit 4	Standard algorithms: Selection & bubble sort
42	Unit 4	Standard algorithms: Sort practice
45	Unit 4	Test review
46	Unit 4	Test
47	Unit 4	(buffer)
48	Unit 4	Algorithm efficiency & big-o
49	Unit 4	Algorithm efficiency & big-o
52	Unit 4	Nature of programming languages (high/low)
53	Unit 1	SDLC and requirements analysis
54	Unit 1	Data flow diagrams
55	Unit 1	System flow diagrams

56	Unit 1	System flow diagrams
59	Unit 1	Other diagrams (gantt, structure)
60	Unit 1	Prototyping
61	Unit 1	Prototyping
62	Unit 1	Implementation (tech stack)
63	Unit 1	Implementation (parallel, phased, direct etc)
66	Unit 1	Testing & backups
67	Unit 1	Unit 1 assignment
68	Unit 1	Unit 1 assignment
69	Unit 1	Unit 1 assignment
Term holiday		
72	Unit 1	Finish unit 1 assignments
73	Unit 2	Binary number systems
74	Unit 2	Binary number systems
75	Unit 2	Representing different data using binary
76	Unit 2	Logic gates & circuits
79	Unit 2	Logic gates & circuits
80	Unit 2	Logic gates & circuits
81	Unit 2	Logic gates & circuits
82	Unit 2	CPU architecture; fetch-decode-execute cycle
83	Unit 2	Operating systems; Primary & secondary memroy
86	Unit 2	Operating systems; Primary & secondary memroy
87	Unit 1	Unit 1 & 2 review past paper questions
88	Unit 2	Unit 1 & 2 review past paper questions
89	Unit 2	Unit 1 & 2 review past paper questions
90	Unit 2	Unit 1 & Unit 2 test
93	Internal assessment	Introduce IA
94	Internal assessment	Criteria A & B start
95	Internal assessment	Criteria A & B start
96	(lost lessons)	Group 4, TOK, Higher Ed days etc
97	(lost lessons)	Group 4, TOK, Higher Ed days etc
Summer holiday		
2	Internal assessment	Review requirements of the Internal Assessment
3	Internal assessment	IA proposals - Individually discuss with teacher for approval
6	Internal assessment	Crit A - Client and scenario
7	Internal assessment	Crit A - Rationale including tech stack; Success criteria
8	Reserved	Lesson reserved for Unit 4 / Unit 5 test
9	Internal assessment	Crit B - Screen mockups (paper & pencil) - review with client
10	Internal assessment	Crit B - Screen mockups (Adobe XD)
13	Internal assessment	Crit B - Pseudo code; other diagrams
14	Internal assessment	Self managed - Program development
15	Internal assessment	Self managed - Program development

16	Internal assessment	Self managed - Program development
17	Internal assessment	Self managed - Program development
20	Internal assessment	Self managed - Program development
21	Internal assessment	Self managed - Program development
22	Internal assessment	Self managed - Program development
23	Internal assessment	Self managed - Program development
25	Internal assessment	Self managed - Program development
26	Internal assessment	Self managed - Program development
27	Internal assessment	Self managed - Program development
28	Internal assessment	Crit C - Identify algorithms, data structures, libraries & tools used. Liaise with teacher to shortlist most suitable for inclusion.
29	Internal assessment	Crit C - Document
31	Internal assessment	Crit C - Document
32	Internal assessment	Crit C - Document
33	Internal assessment	Crit C - Document
34	Internal assessment	Crit C - Document
35	Internal assessment	Crit D - Video
38	Internal assessment	Crit D - Video
39	Internal assessment	Crit E - Evaluation & recommendations
Term holiday		
40	(exams)	Mock exams for paper 1, paper 2 and (HL only) paper 3
41	(exams)	
42	(exams)	
45	(exams)	
46	(exams)	
47	(exams)	
48	Review	Exam post-mortum paper 1
49	Review	Exam post-mortum paper 2
52	Unit 3	Networks; OSI model
53	Unit 3	Types of networks; Network standards
54	Unit 3	Network protocols; VPNs
55	Unit 3	Compression; transmission factors
56	Unit 3	Wireless networks
59	Unit 3	Review & quiz
60	Unit 3	(buffer)
61	Review	Paper 1 focus
62	Review	Paper 1 focus
63	Review	Paper 1 focus
66	Review	Paper 1 focus
67	Review	Paper 2 focus
68	Review	Paper 2 focus
69	Review	Paper 2 focus

Lesson number	Unit	Lesson name
1	Unit 6 Resource mgt	Role of OS
2	Unit 6 Resource mgt	OS management techniques
3	Unit 6 Resource mgt	Virtual memory
4	Unit 6 Resource mgt	Interrupts & polling
5	Unit 6 Resource mgt	Raspberry Pi practical: Setup the OS; connect wifi; create accounts; firewall; che
6	Unit 6 Resource mgt	Review
7	Unit 6 Resource mgt	Test
8	Unit 7 Control sys	Introduce control systems; open & closed loops;
9	Unit 7 Control sys	Microprocessors; sensors; i/o theory
10	Unit 7 Control sys	Centralised & distributed systems; autonomous systems; ethics
11	Unit 7 Control sys	Raspberry Pi practical: Microprocessors; sensors; i/o
12	Unit 7 Control sys	Raspberry Pi practical: Create an open or closed loop system.
13	Unit 7 Control sys	Test
14	Unit 5/D4 ADS	2D arrays: Concept, diagrams
15	Unit 5/D4 ADS	2D arrays: Pseudo/diagram questions
16	Unit 5/D4 ADS	2D arrays: Java
Term holiday		
17	Unit 5/D4 ADS	2D arrays: Java
18	Unit 5/D4 ADS	Recursion
19	Unit 5/D4 ADS	Recursion
20	Unit 5/D4 ADS	Recursion; 2D arrays & recursion mini quiz (last 20 minutes)
21	Unit 5/D4 ADS	Linked lists: Concept; operations
22	Unit 5/D4 ADS	Linked lists: Diagrams; p1 questions
23	Unit 5/D4 ADS	Stacks & queues: Concept, operations, diagrams
24	Unit 5/D4 ADS	Binary trees: Concept; operations; pre/in/post order
25	Unit 5/D4 ADS	Binary trees: Diagrams; p1 questions
26	Unit 5/D4 ADS	Paper 1 style data structure concepts quiz (20 minutes)
27	Unit 5/D4 ADS	Linked lists: Java implementation & exercises
Term holiday		
28	Unit 5/D4 ADS	Linked lists: Java implementation & exercises
29	Unit 5/D4 ADS	Stacks & queues: Java
30	Unit 5/D4 ADS	Binary trees: Java
31	Unit 5/D4 ADS	Past paper questions
32	Unit 5/D4 ADS	Past paper questions
33	Unit 5/D4 ADS	Paper 2 Exam; or end of unit test if no exams
34	(exams)	Group 4, TOK, Higher Ed days etc
35	(exams)	Group 4, TOK, Higher Ed days etc
36	(exams)	
37	(lost)	
38	(lost)	
Summer holiday		

1	Case study	Read and dissect together. Big picture understanding.
2	Case study	Definitions of vocab list
3	Case study	Definitions of vocab list
4	Case study	Identify unanswered questions about the scenario or technical matters
5	Case study	Question 1-3 brainstorm
6	Case study	Question 1-3 practice responses
7	Case study	Question 1-3 practice responses
8	Case study	Swap and peer feedback your practice responses
9	Case study	Class discussion of issues arising from question 1-3 practice
10	Case study	Question 4 Research into the challenges
11	Case study	Question 4 Research into the challenges
12	Case study	Question 4 Research into the challenges
13	Case study	Question 4 practice essay 1
14	Case study	Question 4 practice essay 2
15	Case study	Swap and peer feedback your practice essays
16	Case study	Class discussion of issues arising from question 4 practice
Term holiday		
17	(exams)	Mock exams for paper 1, 2 and 3
18	(exams)	
19	(exams)	
20	Review	Post-mortem HL parts of paper 1 & 2
21	Review	Post-mortem paper 3
22	Review	Review unit 6
23	Review	Review unit 7
24	Review	Review unit 5 & D4
25	Review	Review unit 5 & D4
26	Review	Review case study
27	Review	Review case study