

Week Commencing	Lesson topic(s)	HAIL	Assessment
Staff INSET 01/09 Students Return 02/09	Python programming - Input and output, variables and data types (integer, string, float, Boolean). - Sequence. - Arithmetic operators (+, -, *, /)		
07/09/2026	Python programming - Data type casting - selection, IF/ELIF/ELSE statements	Seneca 2.2 programing fundamentals – data types	
14/09/2026	Python programming Count controlled iteration (FOR loops)	Seneca 2.2 programing fundamentals – count controlled iteration	
21/09/2026	Python programming Condition controlled iteration (WHILE loops)	Seneca 2.2 programing fundamentals – condition controlled iteration	Learning Checkpoint – programming fundamentals.
28/09/2026	Python programming Boolean operators in selection and condition controlled iteration Validation and authentication	Seneca 2.3 robust programs – validation and authentication	
05/10/2026	Boolean logic gates (AND, OR, NOT) Truth tables Applying truth tables to solve logical problems	Seneca 2.4 Boolean logic	Learning Checkpoint – Boolean logic
12/10/2026	Python programming - Creating and using 1D lists 2D lists	Seneca 2.2 programing fundamentals - lists	
19/10/2026	Python programming - List comprehension - List traversal - String indices and slicing (strings as lists – duck typing)	Exam questions (printed)	Learning Checkpoint – Lists
October Half Term			
02/11/2026	Python programming - Subroutines - Procedures and functions - Passing parameters / return values - Scope of variables/parameters	Seneca 2.2 programing fundamentals - procedures	
09/11/2026		Seneca 2.2 programing fundamentals - functions	Learning Checkpoint – Subroutines
16/11/2026		Exam questions (printed)	
23/11/2026	Programming practice, revision and AR preparation.		AR1 ROA
30/11/2026	Python programming - Open text files - Read from text files - Write to text files - Close text files		AR1 ROA
07/12/2026			AR1 ROA
14/12/2026	Programming practice		AR1 ROA

Christmas Break			
04/01/2027	Computational thinking – abstraction, decomposition, algorithmic thinking	Seneca 2.1 algorithms – computational thinking	
11/01/2027	Algorithm design – flowcharts and pseudocode	Seneca 2.1 algorithms – flowcharts	
18/01/2027	Sorting algorithms – bubble sort, merge sort, insertion sort	Seneca 2.1 algorithms – sorting algorithms	
25/01/2027	Searching algorithms -linear search, binary search	Seneca 2.1 algorithms – searching algorithms	Learning Checkpoint – Algorithms
01/02/2027	Languages – high and low level languages, the IDE, translators.	Seneca 2.5 – languages and IDE	
08/02/2027		Exam questions (printed)	Learning Checkpoint – Languages
February Half Term			
22/02/2027	Python programming – defensive design	Seneca 2.3 – robust programs – defensive design	
01/03/2027	Python programming – maintainability	Seneca 2.3 – robust programs – maintainability	
08/03/2027	Python programming - testing	Seneca 2.3 – robust programs – testing	Learning Checkpoint – defensive design, maintainability and testing
15/03/2027	SQL – structured query language. SELECT, FROM, WHERE	Exam questions - printed	
22/03/2027		Exam questions - printed	Learning Checkpoint - SQL
Easter Break			
12/04/2027	The CPU - Von Neumann architecture - CPU performance - Registers - Embedded systems	Seneca 1.1 – systems architecture – The CPU	
13/04/2027		Seneca 1.1 – systems architecture – Von Neumann architecture	
26/04/2027		Seneca 1.1 – systems architecture – Embedded systems	Learning Checkpoint – The CPU
03/05/2027	Python programming recap	Exam questions - printed	
10/05/2027	Primary and secondary storage devices	Seneca 1.2 – memory and storage	
17/05/2027		Seneca 1.2 – memory and storage – secondary storage	Learning Checkpoint – Storage devices
24/05/2027	AR2 revision and preparation.		AR2 ROA

May Half Term			
07/06/2026	AR2 revision and preparation.		AR2 ROA
14/06/2026	Binary and hexadecimal number systems	Seneca 1.2 – memory and storage – binary and hexadecimal	AR2 ROA
21/06/2026	Data storage – units (bits/bytes/kilobytes/megabytes/gigabytes/terabytes/petabytes)	Seneca 1.2 – memory and storage units	AR2 ROA
27/06/2026	Data Representation • Characters – ASCII and Unicode • Images – pixels • Sound – samples Compression	Seneca 1.2 – memory and storage - characters	
05/07/2027		Seneca 1.2 – memory and storage - images	
12/07/2027		Seneca 1.2 – memory and storage - sound	Learning Checkpoint – Data representation