

Long Term Plan: Y10 Computing

Term 1	W/B 10/09	W/B 17/09	W/B 24/09	W/B 01/10	W/B 08/10	W/B 15/10
	Algorithms	Algorithms	Algorithms	Algorithms	Algorithms	Algorithms
	Computational thinking / Abstraction and decomposition	Searching algorithms	Sorting algorithms	Writing algorithms / Pseudocode	Interpreting algorithms / Revision	Assessment and PLC / Feed Forward
Term 2	W/B 31/12	W/B 07/01	W/B 14/01	W/B 21/01	W/B 28/01	W/B 04/02
	Robust Programming	Robust Programming	Robust Programming	Robust Programming	Robust Programming	Robust Programming
	Defensive design	Purposes and types of testing	Syntax and logic errors	Selecting test data	Assessment revision - exam questions	Assessment and PLC / Feed Forward
Term 3	W/B 29/04	W/B 06/05	W/B 13/05	W/B 20/05	W/B 03/06	W/B 10/06
	Languages	Languages	Languages	Languages	Data Representation	Data Representation
	Different levels of programming language	Translators and compilers	IDE's / Revision	Assessment and PLC / Feed Forward	Units of data	Binary conversions - denary to binary and vice versa



W/B 29/10	W/B 05/11	W/B 12/11	W/B 19/11	W/B 26/11
Programming Techniques	Programming Techniques	Programming Techniques	Programming Techniques	Programming Techniques
Variables, constants, operators, input, output	Programming constructs - Sequence, selection and iteration	String Manipulation	File handling	Databases and SQL
W/B 11/02	W/B 25/02	W/B 04/03	W/B 11/03	W/B 18/03
Computational Logic	Computational Logic	Computational Logic	Computational Logic	Computational Logic
Binary representation	Logic diagrams AND OR and NOT	Boolean algebra	Using truth tables in problem solving	Applying computer related mathematics
W/B 17/06	W/B 24/06	W/B 01/07	W/B 08/07	W/B 15/07
Data Representation	Data Representation	Data Representation	Data Representation	Data Representation
Adding binary and overflow errors / Binary shifts	Hexadecimal - Binary - denary conversions	Sound representation / Sampling / lossy and lossless	Image representation / image sizes and formats	Assessment and PLC / Feed Forward

For information on assessments see additional assessment guidance



W/B 03/12	W/B 10/12	W/B 17/12
Programming Techniques	Programming Techniques	Programming Techniques
One and two dimensional arrays and procedures / functions	Data types and operators / Revision	Assessment and PLC / Feed Forward
W/B 25/03	W/B 01/04	W/B 08/04
Computational Logic	Coding challenge	Coding Challenge
Assessment and PLC / Feed Forward	Practical tasks	Practical tasks