

LEARNING JOURNEY GCSE Computer Science

YEAR 11 – Computer Science: TERM 3

J277/02 – PROGRAMMING PROJECT



PRIOR LEARNING (from Key Stage 3):

	TERM 1	TERM 2	TERM 3
YEAR 7	MY DIGITAL WORLD Be SMART online and using ICT Software Mastery: Microsoft Suite	AUDIENCE AND PURPOSE Create products that have impact Software Mastery: PowerPoint	UNDERSTANDING COMPUTERS How computers work Software Mastery: Scratch
YEAR 8	DIGITAL MEDIA Being creative in a digital world Software Mastery: Photoshop	CYBER SECURITY Living in the modern world Software Mastery: PowerPoint	PYTHON BASICS Begin to programme Software Mastery: Python
YEAR 9	CREATIVE DESIGN Creative iMedia taster Software Mastery: Photoshop	ADVANCED PYTHON Computer Science taster Software Mastery: Python	CREATE A VIDEO Research developing technology Software Mastery: Premier Elements

Aim of the Unit

In this unit students will learn how to develop an understanding of programming. Students will learn how to create programs using python. Students will also learn how to develop program constructs and skills in using loops, lists, reading and writing to files.

Topics to be covered:

- Sequence and Selection
- Iteration
- Arrays
- Procedures and functions
- Records and files

Assessment Procedure

The topics covered in this unit, will help prepare students for some of the theory needed for Paper 2. This will be examined at the end of Year 11 and is worth 50% of the final mark for the course. During the lessons, students will undertake informal MCQ (multiple choice questions) to diagnose misconceptions. They will then undertake an end of unit assessment. The assessment will be out of 50 marks.

Homework

Homework will be set at least once a week. Seneca assignments will be assigned to help with knowledge retrieval in the run up to assessments. Details of individual homework can be found on Synergy.

How can you help?

Encourage your child to attend sessions with their teacher after school to improve their understanding. They should also review their theory regularly at home, as well as complete homework's thoroughly as they are all from past exam papers. Support is also available through explainer videos contained on the class team's page.



Ad Astra ★

STARS
 ★ SINCERE ★ THOUGHTFUL ★ ASPIRATIONAL ★ RESILIENT ★ SOLIDARITY ★

Unit 7 – PROGRAMMING (Knowledge & Skills)				
7.1 Programming fundamentals	Date:	😊	😐	😞
Variables Identifier Data type Integer Real/Float Char/Character String Boolean Assignment Constants Input Output Arithmetic Operators Comparison operators MOD DIV Casting Concatenation String Manipulation ASC /Ord - CHR				
7.2 Sequence and Selection	Date:	😊	😐	😞
Sequence Selection Logical operators NOT OR AND Boolean Expressions				
7.3 Iteration	Date:	😊	😐	😞
FOR While End While Do ...Until Nested Loops				
7.4 Arrays	Date:	😊	😐	😞
Array 1 -dimensional Index Subscript Assign 2 – dimensional				
7.5 Procedures and functions	Date:	😊	😐	😞
Procedure Function Parameters randint Local variables Global variables Subroutines Decomposing Tested subroutine library Maintenance				
7.6 Records and Files	Date:	😊	😐	😞
Data structure File SQL Comma- separated value				

Revision, Test and Closing the Gap for topics covered so far	
TEST RESULT :	Target Grade :
Mark :	Percentage :
Grade :	On target?

FUTURE LEARNING :

