

Course Tier Information (where appropriate):

One tier of entry: 9 - 1

Course Assessment:**Component 1: Understanding Computer Science**

Written Examination: 1 hour 45 minutes

50% of qualification

This component investigates data types and representation of data, data structures, Boolean logic and algebra, system software, computer architecture, networking, security and programming languages.

Component 2: Computational Thinking and Programming

On-screen examination: 2 hours

50% of qualification

This component is an on-screen exam which is in three parts. Firstly, students need to construct a basic webpage using HTML. Secondly, students need to write an algorithm (pseudocode) to solve a problem. Lastly, students will use the software Greenfoot to create a program based on a scenario set by the exam board.

Component 3: Software Development

Non – exam assessment: 20 hours

Course requirement (not graded but required)

This component requires you to produce a program with a report based on a given scenario from the exam board. You must analyse the scope of a problem, design a solution to the problem, prototype the solution, evaluate the prototype, refine the initial design, develop a final programmed solution, test the solution and give suggestions for further development of the solution.

General Course Information:

The content of the Eduqas GCSE in Computer Science is based on and mapped against the Computer Science curriculum for schools produced by the CAS Working Group.

The aims of the Eduqas GCSE in Computer Science are to enable learners to:

- develop knowledge and understanding of the fundamental principles and concepts of computer science
 - develop and apply computational thinking skills to analyse problems and design solutions across a range of contexts
 - gain practical experience of designing, writing, and testing computer programs that accomplish specific goals
 - develop the ability to reason, explain and evaluate computing solutions
 - develop awareness of current and emerging trends in computing technologies
 - develop awareness of the impact of computing on individuals, society and the environment, including ethical, legal and ownership issues
- Useful resources/ ways to improve:
- communicate computer science concepts and explain computational solutions clearly and concisely using appropriate terminology.

Controlled Assessment conditions:

The unit is internally assessed under controlled conditions. Students must complete a controlled assessment task provided by Eduqas. Students must complete the task within 20 hours.

Marking of the task is carried out by teachers and moderated by Eduqas against set assessment criteria.

The core textbooks used:

- WJEC Eduqas 9-1 Computer Science - Programming with Python (ZigZag Education: web/6756)

COURSE OVERVIEW — COMPUTING

YEAR 10

SEPT 2019 - JULY 2020

Topics to be studied during the first year of the course.

Unit 1: Hardware,	Unit 4: Data structures,	Component 2: Computational Thinking and Programming
Unit 2: Logical operations,		
Unit 3: Communication (networking) data representation	Unit 5: Organisation of data,	

YEAR 11

SEPT 2020 - JUNE 2021

Topics to be studied during the second year of the course.

Unit 6: System software	Unit 8: Programming,	Component 3: Software Development
Unit 7: Algorithms	Unit 9: security	
	Unit 10: Moral/ethical issues	



“For everyone of us that succeeds, it's because there's somebody there to show you the way out. The light doesn't always necessarily have to be in your family; for me it was teachers and school.” **Oprah Winfrey**