

# COMPUTER SCIENCE - 0478

## Why should I choose IGCSE Computer Science?

- Computer Science develops your confidence in computational thinking and programming.
- Computer Science develops your understanding of the main principles of problem-solving by creating computer-based solutions using algorithms and a high-level programming language.
- Computer Science helps you to understand emerging technologies and the benefits of their use.
- Computer Science helps you to develop a range of technical skills including the ability to test effectively and to evaluate solutions.
- Computer Science develops your understanding of the component parts of computer systems and how they interrelate.

## Is it for me?

- Are you interested in learning about Computer Science and using technical language to communicate by the knowledge and understanding?
- Do you have the knowledge and skills to use a computer?
- Have you studied ICT or have general knowledge in ICT?
- Do you have a passion to work systematically, safely and securely when using technology?
- Do you want to improve your understanding on how technology impacts society?
- Do you want to learn from experiences when creating programs and using technology?
- Do you have the determination and patience to solve unfamiliar problems and design computer programs creatively and independently?
- Are you keen to develop computer science skills and further your understanding of developments in the use of technology?

## Expectations

- You will be expected to develop and research your ideas both in school and outside of school hours.
- You are expected to know how each computer device physically functions.
- You will be expected to perform calculations or conversions as part of your answer.
- You will be taught to use various types of languages for programming, computational mathematics (calculation), algorithms and logic.
- You will study how information is stored as binary data and how a computer system operates on that data.

## How will I be assessed?

All candidates take two components, Paper 1 and Paper 2. There is no practical exam for Computer Science syllabus.

### Paper 1: Computer Systems

Theory paper

1 hour 45 minutes

Short-answer and structured questions

Questions will be based on Topics 1-6 of the subject content

All questions are compulsory

No calculators are permitted

Externally assessed

75 marks

50% of the total marks

### Paper 2: Algorithms, Programming and Logic

Theory paper

1 hour 45 minutes

Short-answer and structured questions and a scenario-based question

Questions will be based on Topics 7-10 of the subject content

All questions are compulsory

No calculators are permitted

Externally assessed

75 marks

50% of the total marks