



Blue Coat Church of England Academy

Year: 10

Subject: Computer Science

Overview

The GCSE (9–1) Computer Science 2020 qualification offers an exciting, practical focus on real-life programming, developing skills relevant to the future.

The GCSE Computer Science is an engaging qualification that equips students with the knowledge and practical skills to thrive in the fast-changing world of Computer Science.

This qualification provides a practical approach to developing computational skills. This includes innovative, practical onscreen assessment to ensure all students develop the computational skills they need for an exciting digital future beyond the classroom.

Computer Science

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/computer-science-2020.html>

This new, up-to-date qualification reflects the fast changing world of Computer Science. Help students develop the computational skills they need for an exciting digital future beyond the classroom with:

- an exciting, practical focus on real-life programming, developing skills relevant to the future
- innovative, practical, future-looking onscreen assessments

GCSE Computer Science will help students think about how technology is created. It allows students to understand how different programmes are created, developing skills that colleges, universities and employers are looking for. Over the course students will cover the following:

Computational thinking: this is the process of thinking through a complex problem, taking the time to understand what the problem is and then develop potential solutions for evaluation. These are then presented in a way that a computer, human or both can understand.

Theoretical content: Students will understand the fundamentals of data representation and computer networks. They will learn about the computer systems and understand the world of cyber security and ethical legal and environmental impacts of digital technology.

Aspects of software development: students will understand how to implement and test a design to make sure it works effectively. Learning how to complete an overall evaluation to help refine the end product.

The qualification's combination of written and practical elements balances theory and practical application, providing students with a rounded experience of computer science.

The qualification has a straightforward structure with six comprehensive topic areas, assessed through two externally-examined papers. One of these is a written paper focused on computational thinking, data, computers, networks, and issues and impact of computing in the world today. The other is a practical onscreen assessment, which focuses on the ability to analyse and solve problems by designing, writing, testing and refining programs.

The ramping in the papers means they have a gradual increase in difficulty, helping build confidence for students as they work through the questions. The papers' consistent assessment structure and straightforward mark schemes make expectations clear to both teachers and students.