

A Level

# COMPUTER SCIENCE

## Course Overview

Look at your everyday life – everything that you do now, whether you realise it or not, is either controlled by a computer, supervised by a computer, stored by a computer or processed and used by a computer.

A-Level Computer Science is a technical subject where the focus is on computer programming using object oriented languages. The course enables students to develop a range of skills in other areas including system development, computer architecture, data, communication and applications.

Computer Science demands both logical discipline and imaginative creativity in the selection and design of algorithms and the writing, testing and debugging of programs. During the course students will develop an understanding of the rules of languages at a simple level and an awareness of the management and organisation of computer systems.

Computer Science at A-Level integrates well with subjects across the curriculum including Arts and Science subjects.

## Teaching Methods

A variety of teaching methods are used and students learn through watching demonstrations, programming, presentations, group discussions and a range of websites to reinforce certain exam aspects of the course.

## Course Activities

Students select their own user-driven problem which enables them to demonstrate the skills and knowledge necessary to meet the assessment objectives.

Students need to:

- Analyse the problem
- Design a solution
- Implement and test the solution
- Provide a thorough evaluation

## Components of Course

### Component 1

40% – Programming and System Development

### Component 2

40%– Computer Architecture, Data, Communication and Applications

### Component 3

20%– Programmed Solution to a Problem (Coursework assessment)

Students analyse, design, implement, test and evaluate a solution to a substantial problem of their choice requiring the production of original code (programming). This will include a word processed description of the development of the system.

## Course Outline

Assessment

Examination - 80%

Coursework - 20%

## Exam Board

Eduqas

## Entry Requirements

A minimum of five GCSEs (with two at grade 6, and three at grade 4) English at grade 4 and Maths at grade 6.

## Student Testimonial



*"Studying ICT at Cadbury has taught me varieties of new skills and techniques on using Microsoft Office. The teachers at Cadbury have helped me throughout the year and also helped me gain great work experience with companies like TATA consultant services to help me prepare for university"*

**Anood Raifi**

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