

# Computer Science - A Level (OCR)

AS/A Level Computer Science is an exciting but demanding subject that will help you develop an analytical, problem-solving approach, which is sometimes called 'computational thinking'. The course will equip you with the fundamentals of problem-solving, which you will put into practice by developing computer programs using Python. It is crucial that you spend time every week developing your programming skills outside lessons. In the second year of the course, you will undertake a significant programming project which you will choose yourself.

You will learn about the computer as an electronic device, and some of the core fundamentals of computing such as logic gates, Boolean algebra and number bases. Networks and internet technologies such as encryption are important areas of the course, and you will learn both the underlying theory and recent developments in this fast-changing area. You will also learn about some of the ways that computer technology has made an impact on society.

## WHAT WILL I STUDY?

From the start of the course, you will learn the fundamentals of problem solving which you will put into practice by developing computer programs using Visual Basic. NET. Programming is creative and satisfying but demanding, especially when you are learning it for the first time.

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In the second year of the course, you will undertake a significant programming project which you will choose yourself. It is strongly recommended that you do some computer programming to help you decide if the subject is right for you, as programming is a very large component of the course. Any language will do, for example, Python, Visual Basic, Java or C#. (Although HTML is useful and fun, it is not strictly a programming language).

## WHAT WILL I NEED?

You will need to meet the minimum entry criteria, plus:

**Start Date: 1 September 2025**

**Duration: 2 Years**

**Attendance: Full Time**

**Center: King's Cross Centre**

<https://www.capitalccg.ac.uk/course/pdf/32373/>

- Maths grade 5
- Computer science (or similar subject) grade 5 or aptitude test before enrolment
- If you do not have Computer Science GCSE, we recommend studying Maths, Science or Economics alongside Computer Science

## HOW WILL I BE ASSESSED?

Assessment is by final exam and coursework, and will test both your underlying knowledge of computing and your problem-solving skills.

## WHAT WILL IT COST?

AGED 16-18

If you will be aged 16, 17 or 18 on 31st August prior to the start date of your course and you have the legal right to remain in the UK for the duration of your programme then your study with us will be free. Please see [here](#) for the documents you will need to show us.

Some courses will have other associated costs, such as for specialist materials and trips. Many of our students are eligible for financial support, see [here](#) for details.

## WHAT CAN I DO AFTER?

A Levels are widely regarded as the standard entry qualification for top universities in the UK, and the rest of the world. Many of our students go on to study for a degree at the university of their choice, with some choosing to progress into apprenticeships or other employment.

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