

*“OUR VISION is to develop world class students who have the belief in themselves that anything is possible and lead happy and successful lives”*



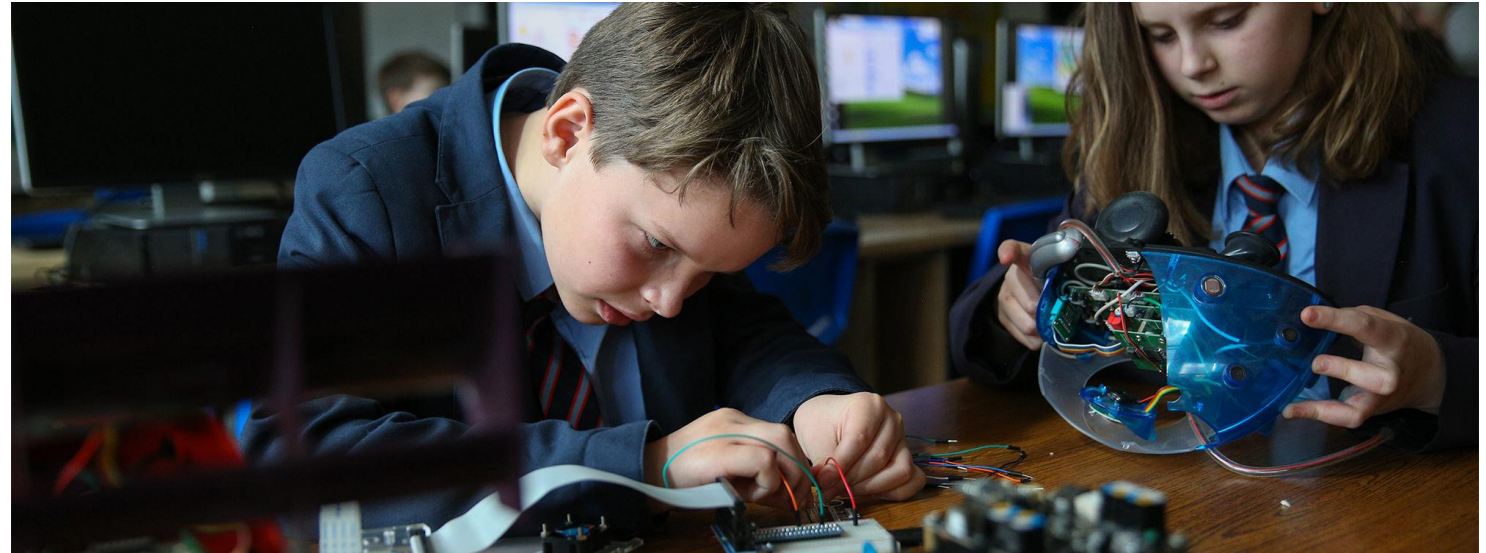
**THE MISBOURNE**

# About the course

**OCR**  
Oxford Cambridge and RSA



- 01 OCR GCSE Computer Science (9-1)
- 01 Specification code: J277
- 01 Two exams in the Summer of 2023



# Content overview



## Component 01 – Computer systems

- 01 Introduction to the central processing unit (CPU)
- 01 Computer memory and storage
- 01 Data representation
- 01 Wired and wireless networks
- 01 Network topologies
- 01 System security and system software
- 01 Ethical, legal, cultural and environmental concerns associated with computer science





# Content overview



## Component 02 – Computational thinking, algorithms and programming

- 01 Students apply knowledge and understanding gained in component 1
- 01 They develop skills and understanding in computational thinking:
  - Algorithms
  - Programming techniques
  - Producing robust programs
  - Computational logic, translators and data representation



# Content overview



## Practical Programming

- 01 Students are to be given the opportunity to undertake a programming task(s) during their course of study which allows them to develop their skills to design, write, test and refine programs using a high-level programming language.
- 01 Students will be assessed on these skills during the written examinations, in particular component 02 (section B).



# Assessment overview



## Paper 1: Computer Systems

- 01 Marks – 80
- 01 Duration – 1 hour 30 mins
- 01 Weighting – 50%

Calculators **not** allowed

## Paper 2: Computational thinking, algorithms and programming

- 01 Marks – 80
- 01 Duration – 1 hour 30 mins
- 01 Weighting – 50%

Calculators **not** allowed



# Supporting learning at home

## Review and Discuss



### 01 At home:

- Speak to your child on a regular basis about what they learnt and encourage them to speak to their teacher if they are unsure of anything
- Encourage them to:
  - Regularly attempt exam practice questions for topics being covered in school. There is an exam practise booklet you can purchase (information on next slide)
  - Study content for challenging questions from lesson notes, course resources or online recommendations
- Read your child's work and help them expand their responses by asking questions like 'how?', 'why?', 'for example?'





# Supporting learning at home

## Encourage Independent coding for fun



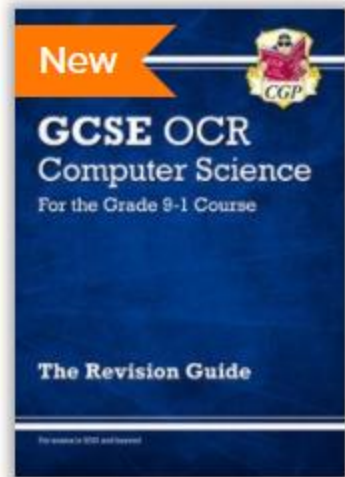
- 01 Provide access to Python IDLE v3.9 (free to download)
- 01 Your child can also sign up to free websites which allow users to code in any browser. E.g.:
  - Trinket.io
  - REPL.IT
- 01 Online Python tutorials:
  - Craig and Dave YouTube Tutorials
  - Pythonschool.net
  - Codeacademy.com





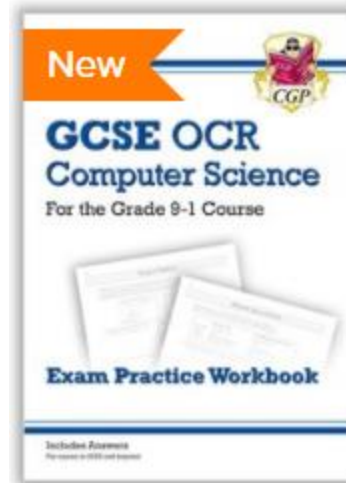
# Supporting learning at home

## Resources in print



New GCSE Computer Science OCR Revision Guide - for exams in 2022 and beyond

(£5.95)



New GCSE Computer Science OCR Exam Practice Workbook - for exams in 2022 and beyond

(£5.95)



New Grade 9-1 GCSE Computer Science OCR Revision Question Cards - for exams in 2022 and beyond

(£8.99)

<https://www.cgpbbooks.co.uk/secondary-books/gcse/computer-science/cor42-new-gcse-computer-science-ocr-revision-guide>



# Supporting learning at home

## Online learning and revision resources



## Revise Computer Science

<https://revisecomputerscience.com/product/ocr-gcse-complete/>

- 01 Comes with £5 subscription fee.
- 01 Very structured and interactive, giving feedback, points & badges.

The screenshot shows a web browser window displaying the product page for 'OCR GCSE Premium' on the website 'revisecomputerscience.com'. The page features a blue header with the site name and navigation links. The main content area has a large blue banner with 'OCR' in yellow and 'PREMIUM' in white on a purple diagonal. To the right, the product name 'OCR GCSE Premium' is listed with a price of '£5.00'. Below the price, a list of features is provided, including lesson videos, interactive presentations, printable notes, embedded flashcards, multiple choice quizzes, progress tracking, quiz analysis, points and badges, and leaderboards. The page also includes a search icon and a breadcrumb trail: 'Home / GCSE PREMIUM / OCR GCSE Premium'.





# Supporting learning at home

Online learning and revision resources



## CraigNDave youtube lecture videos

<https://www.youtube.com/watch?v=7Up7DIPkTzo&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&safe=true>

The screenshot shows a YouTube browser window displaying a playlist titled "OCR GCSE: OCR Specification Order" by the channel "craigdave". The playlist contains 80 videos with a total of 602,444 views, last updated on Nov 8, 2019. The main video player shows a video titled "OCR GCSE COMPUTER SCIENCE 1.1 VON NEUMANN ARCHITECTURE" with a "PLAY ALL" button. The right-hand sidebar lists the first four videos in the playlist:

1. OCR GCSE 1.1 The von Neumann architecture (9:49) - WATCHED
2. OCR GCSE 1.1 How common characteristics of CPUs affect their (6:39) - WATCHED
3. OCR GCSE 1.1 Embedded systems (2:22) - WATCHED
4. OCR GCSE 1.2 RAM and ROM (2:30)

At the bottom of the page, there is a green play button icon, the channel name "craigdave", and a red "SUBSCRIBE" button.





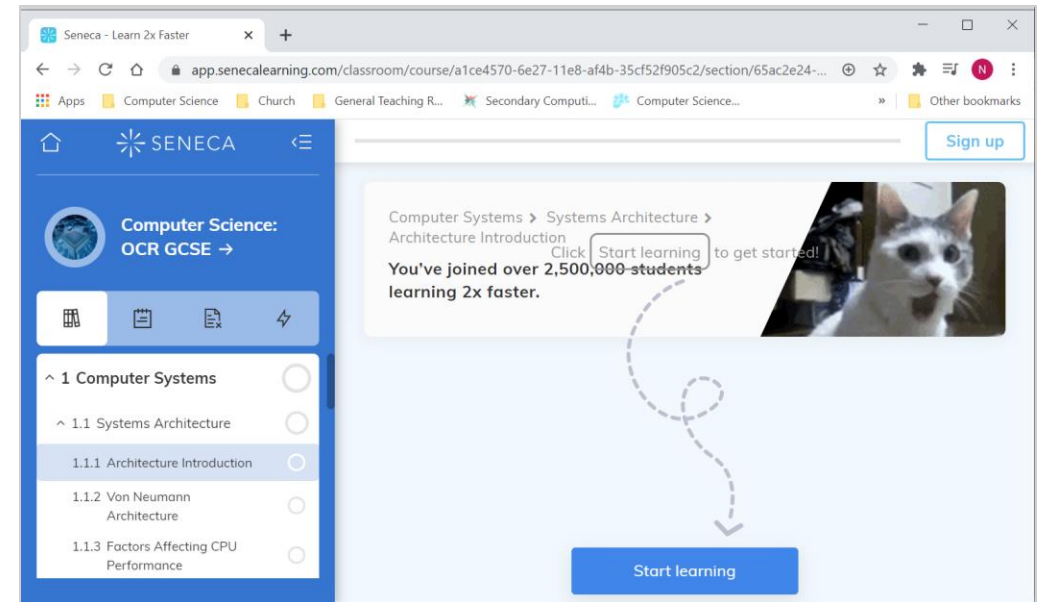
# Supporting learning at home

Online learning and revision resources



**Seneca Learning – Classes set up and progress will be monitored by school.**

<https://app.senecalearning.com/classroom/course/a1ce4570-6e27-11e8-af4b-35cf52f905c2/section/65ac2e24-3b57-4598-b4dc-01e04eddee1b/session>



# Supporting learning at home

[Online learning and revision resources](#)



## BBC Bitesize

<https://www.bbc.co.uk/bitesize/examspecs/zmtchbk>

A screenshot of the BBC Bitesize website. At the top, there is a dark grey banner with a cookie consent message: "Let us know you agree to cookies" and "We use cookies to give you the best online experience. Please let us know if you agree to all of these cookies." with options "Yes, I agree" and "No, take me to settings". Below this is the BBC logo, a "Sign in" button, and a navigation menu with links for News, Sport, Weather, iPlayer, Sounds, and More. A search bar is on the right. The main header is purple with the "Bitesize" logo and a "Change language" dropdown. Below the header is a white navigation bar with links for Home, Learn, Support, Careers, My Bitesize, and All Bitesize. The main content area features a white box with the text "GCSE OCR" and "Computer Science" in large bold letters, with "Part of Computer Science" below it. To the right of this box is an illustration of a desktop monitor and a smartphone displaying the website's interface.



# Further information



Exam board Website:

<https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/specification-at-a-glance/>







**Thank You**