

# Learning pathway: New to GCSE computer science

## Who is this pathway for?

Moving beyond fundamentals, this learning pathway is designed for teachers who have already taught Key Stage 3 computing and want to improve their subject knowledge to meet the requirements of GCSE computer science.

Key stage 4



2 remote learning courses



2 online courses

1

### Python programming constructs

Learn how programs are constructed using the building blocks of sequencing, selection and iteration.



CP423 remote course

2

### The internet and cyber security

Build on knowledge of local computer networks to cover the globally connected systems forming the internet.



CP432 remote course

3

### How computers work: demystifying computation

Explore the fundamentals of computing - computer architecture, binary logic, data processing, circuits, and more.



CO206 online course

4

### Representing data with images and sound

Learn how data is represented through media; audio, visual and text.



CO209 online course

You might also consider...

## Remote learning:

Live courses that are delivered online by our network of Computing Hubs and can be accessed from home. Remote learning offers the flexibility of short sessions designed to fit around your day.

### Other courses to enhance this pathway:

CP431 - Computer processors

CP433 - Python programming: working with data

CP420 - Representing algorithms using flowcharts and pseudocode

## Online courses:

On-demand courses that offer a new and exciting way to learn about computing and digital making. Take part in these free online courses and learn at your own pace, in the comfort of your own home.

### Other courses to enhance this pathway:

CO214 - An introduction to computer networking for teachers

CO213 - Understanding maths and logic in computer science

CO208 - Programming 102: think like a computer scientist

## Take the next step

To find out more about the programme, our national support network and how we can help, email the team at [info@teachcomputing.org](mailto:info@teachcomputing.org)