Learning pathway:
New to computing for design and technology teachers

Who is this pathway for?

For teachers who are new to computing and looking to develop their subject knowledge, this learning pathway will give you a comprehensive introduction to the entire computer science curriculum up to GCSE level.

Key Stage 4 📍 1 remote course 💻 3 online courses

1

An introduction to algorithms, programming and data for design technology teachers

Create some simple block-based computer programs and discover how to implement them in Python.

📍 CP429 remote course

Introduction to programming using robotics

During this course you'll explore different programming techniques and how to apply them to popular platforms such as VEX, Crumble and micro:bit.

Introduction to algorithms, programming and data

Take your first steps towards teaching GCSE computer science and establish a foundational knowledge of concepts and terminology. Explore how to construct programs using block based programming, design algorithms and use data.

2

How computers work: demystifying computation

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

💻 CO206 online course

3

Programming 101: an introduction to Python for educators

Explore the basics of Python. Guided by the Raspberry Pi Foundation, you'll learn to code your first program.

💻 CO207 online course

4

Impact of technology: how to lead classroom discussions

Discover the ethical, legal, cultural, and environmental concerns surrounding computer science.

💻 CO215 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:

CP422 - Fundamentals of computer networks

CP420 - Representing algorithms using flowcharts and pseudocode

CP438 - An introduction to computer systems, networking and security

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

CO209 - Representing data with images and sound: bringing data to life

CO213 - Understanding maths and logic in computer science

Take the next step

Use the questionnaire on your dashboard to support you to find further suitable courses, based on your level of experience.

Download the CSA Handbook to find out more about the topics, explore useful resources, identify further CPD and practice sample assessment questions.

To find out more about the programme, our national support network and how we can help, email the team at **info@teachcomputing.org**.