

Computing Hubs North West

REGIONAL COMPUTING BROCHURE

The Fallibroome Trust

Tameside College
BELIEVE & ACHIEVE

Priestley College Warrington

TCAT
The Challenge Academy Trust

Bingley Grammar School
Belong | Grow | Succeed



We are a collaboration of five Computing Hubs covering the North West. Working with STEM Learning, we offer a wide range of high-quality computing CPD. In this booklet you will find the listings for the courses which are open to the whole region.

Click on the name of your local hub to find their full course listings

Region	Email	X (twitter)
Cheshire and Wirral	teachcomputing@fallibroometrust.com	@ComputingHubFT
Greater Manchester	teachcomputing@tameside.ac.uk	@ComputingHubGM
Lancashire Satellite	teachcomputing@bca.warrington.ac.uk	@ComputingHubLAN
Warrington and Merseyside	teachcomputing@bca.warrington.ac.uk	@ComputingHubLAN
West Yorkshire	teachcomputing@bingleygrammar.org	@ComputingHubBIY

From 1 April 2023, all NCCE teacher CPD, including online, face to face, residential and remote courses, is FREE for state-funded primary schools, secondary schools and colleges.

Further funding information can be found at:
https://teachcomputing.org/funding



PRIMARY REMOTE COURSES ACROSS ENGLAND

Click the course titles below for more information and to book!

Primary short courses	Getting started series	Primary full day courses
Computing Quality Framework – driving change within your primary school	Getting started in Year 1 - short course	Teaching programming using Scratch and Scratch Jr
Adapting the Teach Computing Curriculum for mixed-year classes - short course	Getting started in year 2 - short course	Leading primary computing - module 2
Assessing computational thinking in primary schools - short course	Getting started in year 3 - short course	Introduction to primary computing
Introduction to the Teach Computing Curriculum - short course	Getting started in Year 4 - short course	
Careers and enrichment in primary computing with STEM Ambassadors - short course	Getting started in year 5 - short course	
Literacy via primary computing – building vocabulary and embedding literacy skills	Getting started in Year 6 - short course	
Online safety through primary computing - short course		
Preparing for Ofsted in primary computing - short course		
AI in primary computing - short course		



PRIMARY FACE TO FACE COURSES ACROSS ENGLAND

Click the course titles below for more information and to book!

Primary face to face courses	Primary residential courses
Assessment of primary computing	Bring computing to life using a context-based approach
Computing for specialist teachers of autistic students	Leading and assessing primary computing
Developing and supporting programming within your primary school	Teaching key stage 2 computing
Implementing the Teach Computing Curriculum in your school	Teaching primary computing through contexts
Inclusive Computing in Primary Schools	
Introduction to primary computing	
Leading primary computing - module 1	
Physical computing kits - KS1 BeeBots	
Physical computing kits - KS2 data loggers	
Physical computing kit - KS2 Crumble - short course	
Introduction to the micro:bit in key stage 2	
Using micro:bits to collect data in school surveys	



ONLINE PRIMARY COMPUTING CPD

Click on a course title for more information and to book.
We have a range of online, self-study courses that can be taken anytime.

Creating an Inclusive Classroom: Approaches to Supporting Learners with SEND in Computing

On this course, you will examine the common barriers faced by students with special educational needs and disabilities (SEND) in the computing classroom, and how to address these barriers.

Get started with the Teach Computing Curriculum in your primary school

This course will help improve understanding of computing using the freely available Teach Computing Curriculum and help to understand how to use it to deliver computing in your primary school.

Introduction to Programming with Scratch

On this course you'll learn how to navigate the Scratch programming environment, from the basics of how to use sprites, costumes, and backdrops, to how to create animations and games.

Teaching Computing Systems and Networks to 5 - to 11-year-olds

On this course you'll explore how you can build up young learners' knowledge in an age-appropriate manner. You'll think about how you can to help your learners recognise information technology and how computers process an input to give an output.

Teaching Programming to 5- to 11-year-olds

As well as developing your own understanding of programming, you'll also investigate a range of strategies that you can use to help your pupils.



RESOURCES AND SUPPORT FOR PRIMARY EDUCATORS

Click here for further CPD (remote/face to face) available across England

Click the titles below for more information

Computing Quality Framework

The framework takes schools through each aspect of the computing curriculum with access to the CQF reporting functions, and helps them access the NCCE's support and resources for progress.

Teach Computing Curriculum

Created by subject experts, using the latest pedagogical research and teacher feedback to support schools in teaching computing.

Teach primary computing certification

This professional development programme has been designed to guide primary teachers through our comprehensive offer of courses, enrichment and resources and leads to a nationally recognised certificate.

Primary early career and trainee teachers

We support early career and trainee teachers to develop their teaching of primary computing through professional development, resources and local communities.

Primary computing enrichment activities

Encourage young people to develop life skills through enrichment and engage with the wider community in practical, enjoyable, and meaningful ways.

Physical Computing Kits

Schools can loan Bee-Bots, micro:bits, Crumbles and VU+ Data loggers for FREE half-termly loans.

Promoting Effective Pedagogy

The work of the National Centre for Computing Education is underpinned by 12 principles of Computing Pedagogy. Effective pedagogy is at the heart of good teaching and learning; successful computing teachers combine their knowledge of the subject with evidence-based teaching practices.



SECONDARY FACE TO FACE COURSES

Click the course titles below for more information and booking details

Secondary face to face courses	Secondary short courses	Secondary residential courses
An introduction to algorithms, programming and data in GCSE computer science	Physical computing kit - KS3 micro:bit	An Introduction to A Level Computer Science
An introduction to computer systems, networking and security in GCSE computer science	Physical computing kit - KS4 Raspberry Pi Pico	Developing secondary leadership
Assessment and progression in KS3 computing		Getting started with Python programming
Computing for specialist teachers of autistic students		KS3 creative computing curriculum
Foundation knowledge of computer science for KS3 and GCSE		New to computing
Introduction to algorithms, programming and data for D&T teachers		Supporting student attainment in GCSE computer science
KS3 computing (module 1): Creative curriculum design principles		Teaching GCSE computer science
KS3 computing (module 2): Creative curriculum content, sequencing and pedagogy		
KS3 computing (module 3): Creative curriculum enrichment and inclusion		
KS4 computing for all		
New subject leaders of secondary computing		
Python programming constructs: sequencing, selection and iteration		
Teaching GCSE computer science developing knowledge and understanding		
Teaching GCSE computer science pedagogy for programming		



SECONDARY REMOTE COURSES ACROSS ENGLAND

Click the course titles below for more information and booking details

Secondary remote courses	
Adapted teaching and effective learning interventions in secondary computing	Introduction to Isaac Computer Science
An Introduction to algorithms, programming and data in computer science	Preparing for Ofsted in secondary computing
An introduction to computer systems, networking and security in computer science	Encouraging girls into GCSE computer science
Collaboration in KS3 programming	Python programming constructs: sequencing, selection & iteration
Preparing to take the CSA test	Python programming: advanced subject knowledge, implementation and testing
Creative digital media projects	Python programming: analysis, design and evaluation
New subject leaders of secondary computing	Python programming: working with data
Data-driven IT projects in secondary computing	Representing algorithms using flowcharts and pseudocode
Foundation knowledge of computer science for KS3 and GCSE	Representing algorithms using flowcharts and pseudocode for AQA specification
Fundamentals of computer networks	Representing algorithms using flowcharts and pseudocode for OCR specification
Higher attainment in computer science - meeting the challenges of the exams	Search and sort algorithms
Introduction to algorithms, programming and data for D&T teachers	Solving computational problems in KS3 computing
Maths in computer science	Supporting GCSE computer science students at grades 1-3
Assessment in secondary computing	Teaching GCSE computer science: improving student engagement
Behaviour for learning in a computing environment	The internet and cyber security
Diagnostic assessment for GCSE computer science	Computing Quality Framework – driving change within your secondary school
Enriching secondary computing with STEM Ambassadors in your region	



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A-LEVEL REMOTE COURSES ACROSS ENGLAND

Click the course titles below for more information and booking details

A-Level remote courses
Object oriented programming (OOP) in A Level computer science
Pathfinding algorithms in A Level computer science
Assembly language in A Level computer science
Boolean logic in A Level computer science
Data structures in A Level computer science
Systems architecture in A Level computer science
Introduction to Isaac Computer Science



ONLINE SECONDARY COMPUTING CPD

Click on a course title for more information and to book.
We have a range of online, self-study courses that can be taken anytime.

An Introduction to Computer Networking for Teachers
Creating an Inclusive Classroom: Approaches to Supporting Learners with SEND in Computing
Data Representation in Computing: Bring Data to Life
Design and Prototype Embedded Computer Systems
How Computers Work: Demystifying Computation
How to utilise the Teach Computing Curriculum effectively (Key Stages 3 and 4)
Impact of Technology: How To Lead Classroom Discussions
Introduction to Cybersecurity for Teachers
Introduction to databases and SQL
Introduction to Encryption and Cryptography
Introduction to Machine Learning and AI
Introduction to Programming with Scratch
Introduction to Web Development
Object-oriented Programming in Python: Create Your Own Adventure Game
Programming 101: An Introduction to Python for Educators
Programming 102: Think like a Computer Scientist
Programming 103: Saving and Structuring Data
Programming Pedagogy in Secondary Schools: Inspiring Computing Teaching
Programming with GUIs
Understanding Computer Systems
Understanding Maths and Logic in Computer Science



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RESOURCES AND SUPPORT FOR SECONDARY EDUCATORS

Click the titles for more information

GCSE Computer Science support

We are dedicated to working with schools that don't currently offer GCSE Computer Science to their students. You can get fully-funded support from a dedicated Subject Matter Expert (SME) who will work with you for up to three full days to determine the next steps, create an action plan and support you on your journey.

Secondary teacher certification

Develop your subject knowledge and classroom practice with a National Centre for Computing Education certificate; improve your confidence and take your career to the next level.

iBelong

Our evidence-informed programme aims to help teachers and leaders understand the barriers to girls' participation in computer science and make a plan to overcome them. We offer curated resources, training and implementation support to empower you with the tools to support more girls into computer science qualifications and careers.

Isaac Computer Science

Access a huge range of time-saving learning materials that cover the full A level and GCSE Computer Science curricula for the AQA, OCR, Edexcel, and Eduqas exam specifications — all for free!

Secondary early career and trainee teachers

We support early career and trainee teachers to develop their computing subject knowledge and pedagogy through professional development, resources and local communities.

Secondary computing enrichment activities

Encourage your students to develop important life skills through enrichment and engage with the wider community in practical, enjoyable, and meaningful ways.

Physical computing kits

Schools can loan micro:bits, Raspberry Pi Picos and Raspberry Pi 3B+ for FREE half-termly loans.

Promoting effective pedagogy

The work of the National Centre for Computing Education is underpinned by 12 principles of Computing Pedagogy. Effective pedagogy is at the heart of good teaching and learning; successful computing teachers combine their knowledge of the subject with evidence-based teaching practices.

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North West Computing Hub

National Centre for Computing Education

How to gain your Primary Certificate in Teaching Computing - 30 minute sessions

Would you like to gain a certificate (*and a shiny badge!*) in teaching primary computing accredited by the BCS (The Chartered Institute for IT)?

If you have already completed some of our **Teach Computing CPD** you might be well on your way to completion!

Join us on 18th June or 26th June in our lunchtime or twilight sessions to find out your next steps.

18th June lunchtime | **18th June Twilight** | **26th June lunchtime** | **26th June Twilight**

Suggested 'leadership' pathway:

1. Complete 6 hours of CPD from **the pathway menu**
2. Review a **Teach Computing resource** and say how you adapted this in your classroom (3-4 sentences).
3. Complete your initial assessment on the **Computing Quality Framework** (5 minutes).

Suggested 'developing' pathway:

1. Complete 6 hours of CPD from **the pathway menu**.
2. Review a **Teach Computing resource** and say how you adapted this in your classroom (3-4 sentences or more).
3. Share tips on how you have used a **Teach Computing resource** in your classroom (3-4 sentences or more) on the **STEM Community**.

Email: **teachcomputing@fallibroometrust.com**

Twitter: **@ComputingHubFT**

The Fallibroome Trust | Tameside College Believe & Achieve | Priestley College Warrington | TCAT The Challenge Academy Trust | Bingley Grammar School Belong | Grow | Succeed

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Find all of our resources online at:
https://teachcomputing.org/