National Centre for Computing Education

MGL

**Regional Delivery Partner
for North West England**

Data and computer systems in GCSE computer science

Broaden your understanding of data and computer systems to enhance your teaching of GCSE computer science in this 2 day course.

Summary

This course is delivered as part of the National Centre for Computing Education, and forms part of the Computer Science Accelerator programme.

Computer programs are written in a language that humans understand, but what about the computer itself? Every piece of software, and the instructions and data it contains, is made up of 1's and 0's, pushed around the parts of a computer system.

This course opens the box, looking at the components of a computer, what they do and how they work together in computer systems. You'll learn about the processor that sits at the centre, as well as memory, storage and the other key pieces of hardware.

Mapped closely to the specifications of GCSE computer science, the course will provide you with deepened knowledge and confidence to equip your students with for their exams.

Outcomes

You will gain the required knowledge to help your students:

- know the function of the main parts of a computer system, including detailed knowledge of the processor
- develop a firm understanding of the fetch-decode-execute cycle
- follow how high-level programming languages translate to machine code, represented in binary
- understand how changes to processor architecture, storage and memory affect the performance of a computer

Price: £0 per delegate*

*This course is part of the GCSE Computer Science Accelerator Programme CPD and is free for your teaching staff if they do not have an existing degree in Computer Science or related degree. In addition, a bursary of £220 per day can be reclaimed as long as the teacher completes 2 x 2d face to face training courses (total £880). Any subsequent courses a teacher undertakes are free of charge but no bursary is available. There is also an additional bursary of £600 if the teacher completes 16 hours of online training modules and the associated online knowledge test. The time frame for these bursaries is the teacher must complete the face to face training. online learning and knowledge test by 31st July to receive the total bursary of £1480. All bursaries are managed by Stem Learning as part of the course booking and delivery process and will be paid direct to the school.

Non-eligible teachers or teachers from non state maintained schools will pay £440 per course and will not be eligible for a bursary. Online training is free of charge.

Further bursary information can be found here teachcomputing.org/bursary

This is a 2 day course. Delegates will be booked onto both dates.

Course Dates

> 4 April and 10 May 2019
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> 11 June and 10 July 2019
>
> 24 June and 8 July 2019
>
> 23 September and 7 October 2019

Sign up to courses via: www.mglworld.com/ncce