



# TSST PHYSICS

FULLY  FUNDED

## Strengthening your expertise in Physics

Delta Academies Trust is proud to partner with the Institute of Physics to offer Teacher Subject Specialism Training (TSST) Physics to new, non-specialist and returning teachers.

TSST Physics is a sustained professional learning programme, which will enhance your subject knowledge and pedagogical content knowledge, helping you to transform student outcomes in Physics.

Delivered by highly experienced Physics specialists, each training session focuses on a separate part of the GCSE specification paying particular attention to carrying out the 'required practical' component. The programme also refines calculation skills and this aspect consistently ranks highly as a valuable and rewarding part of the TSST course we run.

The course is fully funded by the DfE, and consists of six sessions which will take place during term-time.

Every training session is designed to cater for each participant's needs. As well as carrying out each of the required practical tasks, alternative practical approaches are explored to accommodate schools and academies with different lab equipment, and to differentiate for the wide range of ability found in all schools. Given the extensive experience of your Physics specialist programme leader, you will gain valuable tips and insight into how to support, stretch and challenge all students.

All resources supporting the course are sent out to participants after each of the training sessions and are free to use or adapt into your lesson delivery. This includes example exam questions, PowerPoint resources, teaching and learning animations and classroom materials.

**Enrolling on this course, developing your Physics knowledge and confidence, will undoubtedly enhance the Physics teaching and learning in your classroom and add to your professional skill-set.**

**Changing Lives...**

**TSST Physics will cover the following essentials, which will enable colleagues to hone their knowledge and take practical ideas and strategies to their classrooms – immediately. Training will be delivered on-site, involving practical training as well as addressing concepts and misconceptions, with all necessary precautions give the changeable situation regards coronavirus/Covid19. There are two available dates for each session:**

**Programme Leader:** David Collyer, Science Teacher, Garforth Academy  
Tuesdays 1:30-4:30

Date	Time	Session details	Delivery
22/09/20	1.30pm-4.30pm	Energy Resources (energy stores and pathways, calculating energy, the specific heat capacity practical and renewable energy)	Microsoft Teams
13/10/20	1.30pm-4.30pm	Forces and Work Done (using scalars and vectors, work, elastic extension and the required practical)	Microsoft Teams
17/11/20	1.30pm-4.30pm	Forces and motion (displacement, velocity, motion graphs, Newton's laws and momentum)	Microsoft Teams
8/12/20	1.30pm-4.30pm	Particle Model and Atomic Structure (particle arrangements, the density practicals, internal energy plus atoms, isotopes, radioactivity and half-life)	Microsoft Teams
19/01/21	1.30pm-4.30pm	Electricity (current, potential difference, charge, resistance the resistance practicals, domestic electricity and the national grid)	Microsoft Teams
9/2/21	1.30pm-4.30pm	Waves and Magnetism (types of wave, their properties, the waves required practicals, the electromagnetic spectrum plus induced and permanent magnetism, magnetism practicals, investigating a magnetic field and the field around currents in wires)	Microsoft Teams

**Programme Leader:** Martin Court, Head of Science, The Vale Academy  
Tuesdays 1:30-4:30

Date	Time	Session details	Delivery
24/09/20	1.30pm-4.30pm	Energy Resources (energy stores and pathways, calculating energy, the specific heat capacity practical and renewable energy)	Microsoft Teams
15/10/20	1.30pm-4.30pm	Forces and Work Done (using scalars and vectors, work, elastic extension and the required practical)	Microsoft Teams
19/11/20	1.30pm-4.30pm	Forces and motion (displacement, velocity, motion graphs, Newton's laws and momentum)	Microsoft Teams
10/12/20	1.30pm-4.30pm	Particle Model and Atomic Structure (particle arrangements, the density practicals, internal energy plus atoms, isotopes, radioactivity and half-life)	Microsoft Teams
21/01/21	1.30pm-4.30pm	Electricity (current, potential difference, charge, resistance the resistance practicals, domestic electricity and the national grid)	Microsoft Teams
11/2/21	1.30pm-4.30pm	Waves and Magnetism (types of wave, their properties, the waves required practicals, the electromagnetic spectrum plus induced and permanent magnetism, magnetism practicals, investigating a magnetic field and the field around currents in wires)	Microsoft Teams

Participants will complete the programme and certificate in March 2021.

**To book your place, or to book a colleague's place, please email Chris Hoyle, Director of Science, at [Christopher.Hoyle@deltatrust.org.uk](mailto:Christopher.Hoyle@deltatrust.org.uk)**

"The knowledge and understanding was clear, and beautifully explained and demonstrated."

"Best CPD I've had in years."

"A real inspiration, excellent insight"