

**AUGUST
2023**

Adastral Park EDUCATION & SKILLS NEWSLETTER



'STEAM for Good'

STEAM



EDUCATION

<https://atadastral.co.uk/>

This Adastral Park Education & Skills Newsletter brings you the top-level news from each member of our education & skills team in one place – celebrating our schools and industry collaborations.

The Adastral Park Team support different aspects of school and student needs from running events to create STEAM [Science, Technology, Engineering, the Arts and Maths] interest in young people, to providing meaningful industry encounters, through to work experience and careers fairs.

Don't forget to make the most of the virtual content that we have available: <https://atadastral.co.uk/careers-education/>

Please forward this Newsletter onto all Science, Technology, Engineering, Arts & Maths Teachers in your school. If this email has been forwarded onto you by someone other than us but you would like to receive the info directly, please email: computerscience@bt.com with your email address and school and we'll add you to our mailing list.

INTRODUCTION

Happy New Academic Year

We are looking forward to a new year with new activities for you to get involved with and new resources to use. In this Newsletter we're really thrilled to be able to share the **Pharmabees project**, which is run by Cardiff University, and its array of resources with you.

We'll be holding our first **Teacher Advisory Panel** meeting on **18th September, 4pm via Teams**, please email us at computerscience@bt.com if you'd like to join. If you can't join, we'd still love to **hear your opinions and suggestions**, so please drop us a line.

Outreach Programme - Do you have a venue we could use to run activities?

We're aware that for some schools the cost of transport to Adastral Park prevents them from taking part in our face-to-face activities. We are looking for alternative venues where we could hold events which are within walking/shorter travelling distance of several schools. If you have a venue with power, Wi-Fi access and where we could hold events for around 60 students at a time, please let us know (email computerscience@bt.com).

A **huge thank you** to **Clifford Road Primary School, West Suffolk College, Wickham Market School** and **Woodbridge School** who have kindly offered us the use of their facilities so far.

DATES FOR YOUR DIARY

FACE TO FACE EVENTS:

- **3rd & 4th October 2023: Introduction to Physical Computing, Yr 5 & 6**
- **18th Oct 2023: BT Business Enterprise Day, Yr9 – FULLY BOOKED**
- **30th Oct 2023: Making Tech Relevant, Teacher Event**
- **17th Nov 2023: Computational Thinking at Clifford Road Primary, Yr 3 & 4 – FULLY BOOKED**
- **Thu 7th Dec 2023: ChriSTEMas Lectures, Y11+**
- **2023-2024: Skills Escalator Days, Yr2**

VIRTUAL:

- **18th Sep 2023, 4pm: Teacher Advisory Panel**
- **11th-15th March 2024: Virtual British Science Week**

CHALLENGES & RESOURCES

- **Sustainability Poetry Competition – CLOSING DATE: 8th Sept**

- Free Computing Education Support, Resources & CPD
- Royal Society - The Young People's Book Prize
- Cyber First Girls Competition
- Pharmabees Resources
- Free Micro:Bits and Resources
- IET Faraday® Challenge Days
- CREST Awards
- Youth STEMM Awards
- Inspiring The Future - Redraw The Balance

PAST EVENTS & ACTIVITIES

- Nuffield Placements
- Technology Day

LIFE AT WORK

- Work Experience
- Insights Experience
- Year 8/9 Assemblies

EARLY CAREERS

- Opportunities at BT

DATES FOR YOUR DIARY – FACE TO FACE EVENTS

TITLE: INTRODUCTION TO PHYSICAL COMPUTING
DATES: Tue 3rd or Wed 4th October 2023
TIMES: 9.30am-3pm
AVAILABLE TO: Years 5 and 6
PREREQUISITES: ScratchJr/Scratch/Blockly Programming knowledge - very useful
LOCATION: Adastral Park, Martlesham Heath, IP5 3RE
PLACES: 15 students per school
DETAILS: Introduction to programming types of Physical Robots using different block-based programming environments.



Email computerscience@bt.com to reserve places.

TITLE: FESTIVAL OF LEARNING: MAKING TECH RELEVANT:
 Linking Tech Industry with Curriculum to
 Bring Learning Alive!
DATE: Monday 30th October 2023
AVAILABLE TO: Teachers
LOCATION: Adastral Park, Martlesham Heath, IP5 3RE


MAKING TECH RELEVANT



Festival of Learning

A festival style conference with three overlapping themes, underpinned by evidence based practice - suitable for all phases and all profiles of education professional. Panel debate, CPD workshops and incredible immersive demonstrations.

- Edtech to improve learning: Growing Skills and Confidence in Classroom Pedagogy
- Linking Careers & Industry with Curriculum: Infusing what we teach with industry Insights and experience

- Human Skills in a Technological World: Leadership, Mentoring, Soft-Skills & Ethics for a Fast Changing World

Register here for FREE: festivaloflearning.edlink.uk

TITLE: ChriSTEMas Event
DATE: Thu 7th Dec 2023
TIMES: 9.30am-3pm
AVAILABLE TO: Years 11-13 who have strong interest in a career in STEM
LOCATION: Adastral Park, Martlesham Heath, IP5 3RE
PLACES: 15 students per school
DETAILS:



- An overview of what goes on at Adastral Park, including insights from our Apprentices & Graduates.
- Keynote Talk – details TBA, but it will be an exciting in depth talk on the future of technology in the workplace.
- Hands on exhibits from different companies involved in STEM.
- An opportunity to visit the BT Showcase Facility featuring technology demos across industry-themed showcases.

Email computerscience@bt.com to reserve places. Also contact us if there are any particular themes or topics you'd like us to cover.

SKILLS ESCALATOR DAYS YEAR 2

The Schools Enrichment Team will be at these Events.

For more information please contact: Victoria.fiebelkorn@wsc.ac.uk.

SKILLS ESCALATOR DAYS (SEDs)

Activities focussing on career related learning, delivered by local government, business, and industry, for pupils in school year 2 aged 6 to 7 (unless otherwise stated) at the following locations:



Newmarket 20 September 2023 NEW VENUE
 TATTERSALLS PARK PADDOCKS, THE AVENUE, NEWMARKET, CB8 9AY

Bury St Edmunds 9 & 10 October 2023
 WEST SUFFOLK COLLEGE, BUILT ENVIRONMENT CAMPUS, IP32 6SR

DATES FOR YOUR DIARY – VIRTUAL EVENTS

TITLE: TEACHER ADVISORY PANEL
DATE: Monday 18th September 2023,
TIMES: 4pm-5.30pm
AVAILABLE TO: Teachers
LOCATION: TEAMS
DETAILS:



We're looking for teachers to join our **teacher panel**. The panel will act as an advisory board for our programme, keeping us up to date on what is happening in schools and making sure our programme is engaging and inspiring. Meetings to be held once a term, initially with virtual attendance but with an option of face to face at Adastral in the future. We are especially looking for more primary teachers to join us. If you're interested joining please email computerscience@bt.com.

TITLE: **VIRTUAL BRITISH SCIENCE WEEK**
DATES: **11th-14th March 2024**
LOCATION: **Online**
DETAILS:



We're beginning to think about our content for BSW next year. We have a few ideas but if there are any particular themes or topics you'd like us to cover please email us at computerscience@bt.com

CHALLENGES & RESOURCES

SUSTAINABILITY POETRY COMPETITION – Years 4 & 5



BT Adastral Park would like to invite schools from the local area to take part in a

SUSTAINABILITY POETRY COMPETITION

to support our upcoming Sustainability Festival.

The competition is for students currently in Year 4 or Year 5 to write and illustrate a poem on the theme of sustainability.

You could choose saving the rain forests, turning lights off, recycling or any other sustainability topic which is important to you. We are looking for the most inspiring and creative poems and will be displaying ALL entries at our Sustainability Festival in September.

This festival will see over 1,000 people from many different companies, government and universities coming to Adastral Park to help shape the future and ensure that we are doing everything we can to help save our amazing planet.



The winning entry will receive a **£20** book voucher, plus **£100** in book vouchers for their school. Runners up will be awarded a **£10** book voucher and **£70** book voucher for their school.

Paper entries can be dropped at Adastral Park Reception or posted to Lisa Ford, Orion pp5/5, Adastral Park, Ipswich. IP5 3RE (please mark clearly POETRY COMPETITION)

Electronic entries in PDF format can be emailed to computerscience@bt.com

Please ensure entries are **no bigger than A4** in size and that they have the **name of the student, their year group and school** on the back. Please do not include names on the front.

Entries will close on 8th September 2023, with winners announced after the event which is taking place in the 13th September 2023.

FREE COMPUTING EDUCATION SUPPORT, RESOURCES & CPD



Are you looking for FREE Computing education support, resources and CPD for your school? Then the Suffolk and Colchester Hub can help you!

What is the Suffolk and Colchester Computer Hub?

The Suffolk and Colchester Computer Hub (CHuB) is part of the National Centre of Computing Education (NCCE) run by STEM Learning and funded by the DfE. Not in Suffolk or Colchester? Find your local Computing Hub [here](#)

How can we help?

The overall aim is to help you teach high-quality computing education to all young people. Computing Hubs work with you to help identify your needs and provide a targeted programme of support to help embed computing in your school as well as helping you identify any CPD needs. All support and CPD is **FREE** and independent of the computing curriculum you are using.

If you would like to meet the team and find out more on how we can help, then we are running a FREE live remote session on **Wed 20th Sep 4pm-5:30pm** Find out more and book [here](#) or email teachcomputing@wsc.ac.uk to reserve your place

What is the Computing Quality Framework?

The Computing Quality Framework (CQF) has been funded by the DfE. It provides you a self review of seven aspects of computing from leadership, curriculum, CPD, impact, careers and assessment and helps you identify your strengths and weaknesses in your computing curriculum. It helps you:

- create an action plan.
- access support
- identify and access free CPD to help you improve your computing offer
- track progress towards achieving the CQF Mark (National Accreditation)

To get started with the CQF (for free)

- go to <https://computingqualityframework.org/>
- Create an account
- Click "Start Review"
- Choose a level for each of the 7 aspects
- Type "in progress" in each of the boxes
- The computing hubs can focus free support based on the self-review
- You can then continue the review process as an ongoing process at convenience

What FREE CPD is available?

All CPD is free to access. Additionally, primary schools will receive one subsidy per academic year of £205 for a qualifying course. An additional subsidy is available for secondary schools.

To BOOK PRIMARY COURSES click [HERE](#). Example F2F primary courses include:

- Assessment for Primary Computing
- Developing and supporting programming within your primary school
- Implementing the Teach Computing curriculum in your school
- Leading primary computing – module 1
- Computing for specialist teachers of autistic students
- Primary computing for all
- Introduction to the Micro:Bit in KS2
- Physical computing – KS2 Crumble

To BOOK SECONDARY COURSES click [HERE](#). Example secondary courses include:

- Python programming constructs: sequencing, selection and iteration
- Foundation knowledge of Computer Science for KS4 and GCSE
- Introduction to algorithms, programming, and data in GCSE computer Science
- Assessment in secondary computing

- Python programming working with data.
- Diagnostic assessment for GCSE computer Science

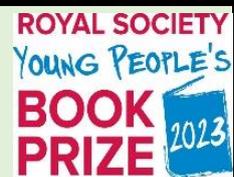
See the full list of our FREE scheduled courses [HERE](#). These are all locally led by the Suffolk and Colchester Computing Hub and can be F2F or remote and lasts from an hour to all day depending on the course.

Please do contact us if there is a specific course that you are interested in, can't see scheduled or is at a time or day that doesn't work for you. If you have a group of teachers or schools that would like their own course or if you would like to host a course for schools in your area please do get in touch. We will work with you to find the best solution.

Got any questions? Need some help? Please contact us teachcomputing@wsc.ac.uk or pam.popay@easterneducationgroup.ac.uk

ROYAL SOCIETY - THE YOUNG PEOPLE'S BOOK PRIZE

The Young People's Book Prize aims to promote literacy in young people and to inspire them to read about science. It also supports the writing of excellent, accessible STEM books for under-14s.



Every year we invite school and youth groups to join our collection of judging panels from across the UK who pick the winner of the Young People's Book Prize. Over 450 judging panels receive a free set of shortlisted books – it's a great opportunity to receive six brilliant books aimed at enthusing and exciting children about science.

Schools and youth groups can [get involved with the Prize](#). The call for judging panels will open in September 2023.

CYBERFIRST GIRLS COMPETITION

CyberFirst have reviewed how they run their Girls competition. The entire competition will now be held online with the 13 regional and home nation top scoring teams across the UK being invited to a celebratory event.



The registrations open on 25th September 2023, with the competition starting on the 20th November 2023 and closing on 29th November 2023.

More details on the CyberFirst Girls Competition can be found here: [CyberFirst Girls Competition - NCSC.GOV.UK](#).

PHARMABEES RESOURCES

The award-winning [Pharmabees](#) project at Cardiff University is exploring how bees and the honey they produce can help scientists to discover new drugs and fight against superbugs.



As part of the project, there are some amazing online resources for schools covering topics including why bees are important, biodiversity and pollination: [Educational Resources – Pharmabees | Cardiff University Pharmabees](#)

FREE MICRO:BITS!

Micro:bit Educational Foundation, BBC and Nominet have joined forces to offer 30 BBC Micro:Bit devices to every primary school in the UK. Applications are now open until 18th December 2023. One application per school. Visit microbit.org/thenextgen-registration/.



Visit the Micro:bit website to learn how to sense, measure and log light; temperature; sound; movement and magnetism. Explore buttons; LEDs; Radio; Networks; Simple Circuits and PINs. Add code to bring the Micro:Bit to life. Change the code to transform it into something new.

Micro:bit offer free professional development courses and live webinars for those getting started as well as more experienced teachers. Lots of teaching resources are available along with Micro:bit classroom where you can run whole class sessions, easily share code with students and keep a record of progress.

Microbit.org/teach/featured/

IET FARADAY® CHALLENGE DAYS



An annual competition of STEM activity days with a real-world challenge for pupils aged 12-13 years. IET also offer printable resources and guidance to run your own Challenge, choosing a time and theme that suits your students.

The 2023-24 IET Faraday® Challenge season will start in September 2023 and run right through to June 2024. For more information please visit: [IET Faraday Challenge Days \(theiet.org\)](https://theiet.org).

CREST AWARDS

CREST is the British Science Association's flagship education programme, providing enrichment activities to inspire, engage and connect young people aged 5-19 across the UK with STEM.

The scheme inspires young people to think and behave like scientists and engineers. CREST empowers young people to investigate issues they care about, helping them to see how science is relevant to their everyday lives and futures and raising their STEM aspirations at school and beyond.

The scheme also provides teachers and home educators with simple and adaptable activities linked to the national curriculum – from off the shelf 1 hour challenges to larger scale student-led projects of 70+ hours' work.

Read more [here](#)



YOUTH STEMM AWARDS

The [Youth STEMM Award](#) supports and inspires the next generation into STEMM. Students aged 11 – 19 can register and work towards a Bronze, Silver or Gold Award by undertaking STEMM-based activities at school, at home or online - including trips, visits and after school clubs, projects and work experience - so long as they are over and above normal lessons and homework. By logging hours they spend on each activity, along with a description of what they learnt to their



personal portfolio, they will receive their digital badge; medal and certificate on completion.

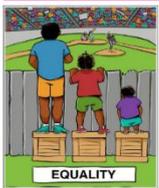
The [Youth STEMM Award Juniors](#) is a workbook and sticker pack designed to accompany hands-on activities and inspire younger children to explore the amazing world of STEMM. It is completely free and an exciting way for children in Key Stages 2 and 3 to help develop their excitement, engagement and interest in the wonderful world of STEMM!

INSPIRING THE FUTURE - REDRAW THE BALANCE

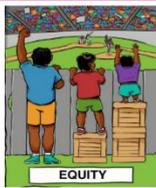
Some of our team attended a pilot [Equity Compass](#) training session with STEMPoint East recently. During a discussion, we were shown a powerful film from MullenLowe London that provocatively captures how, early on in their education, children already define career opportunities as male and female. When asked to draw a firefighter, surgeon and a fighter pilot, 61 pictures were drawn of men and only 5 were female. This thought-provoking [video](#) provides a great message and interesting discussion point. **#redrawthebalance**



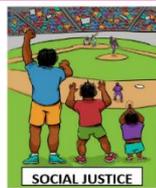
The Equity Compass helps you adopt a social justice mindset



"I treat all participants the same"



"I engage with participants differently, according to needs, giving more to those who need more/are most disadvantaged"



"I try to change the structures and practices within my practice that create and maintain inequalities"

We were also shown this image at the training session, which we felt was very striking and again a good discussion point

PAST EVENTS & ACTIVITIES

NUFFIELD PLACEMENTS - Another Great Success!

BT were delighted to host 11 Nuffield Research students recently at Adastral Park. The students were based in BT's Research & Networks Strategy, where they worked closely with BT Supervisors on projects requiring learning to code with Python; problem solving; project algorithms; time management and working as a team.



Towards the end of the placements, the students presented to the BT team and Alex Perry from STEMPoint East.

The students provided some lovely feedback, including:

- how they gained insights into the world of STEM work, which has been really useful for their future career plans
- how they have learned new skills, including technical and soft skills required by employees in a workplace
- that they formed good relationships with their supervisors and their fellow students

- how they had become more confident about STEM work and how much they enjoyed their placements overall.

The BT supervisors were really impressed by the work of all the students on the challenging projects that had been given to them – and were proud to see their confidence grow through the placement.

The students took part in extra activities during their placement, including a tour around Adastral Park's customer showcase, as well as a tour of the Immersive Lab where BT are developing interactive content for their customers using both extended reality and virtual reality. The students enjoyed learning how 3D images of themselves can be created and manipulated using these technologies.

Thank you to Alex Perry for co-ordinating the Nuffield Placements with BT's Tom Bowman, plus of course all the supervisors involved; the Showcase and Immersive lab teams but also a big thank you to the students who gave 100%.

TECHNOLOGY DAY 14TH JUNE 2023

On 14th June, 200 year 10 and 12 students attended our Technology Day at Adastral Park, exploring the technologies we're working on and the careers available. A jam-packed day, activities included visiting our drones and robotics lab, touring our technology showcases, coding games at the University of Suffolk's DigiTech Centre and hearing talks from our experts on AI.

You can see some of the highlights, along with similar days held at other companies, in this video from the IET: [Engineering Open House Week 12-18 June 2023 \(theiet.org\)](https://www.theiet.org)

LIFE AT WORK

[Adastral Park](#) is a fantastic campus. We like to reach as many students as possible to introduce them to opportunities here and inspire and guide them into a bright future.



The starting Life@Work message:

- 'Tech skills' are good to have, but 'Tech interest' is essential
- Transferable skills are essential: Communication, Time management, Teamwork, Leadership, Know yourself, ...
- The future is lifelong learning of tech, creative and life skills

Work Experience at Adastral Park

What a season we had this year: 9 weeks, 45 schools, 138 placements and 100 volunteers involved!

I wholeheartedly thank the schools' staff for their patience and understanding: It was a bit of an undertaking to get it all in place, but we made it – together!

We are now planning for the next season, please have a look at our details looking forward into 2024!

- The 2024 experience period: 20th May – 26th July.

- Duration of a work experience placement: 1 week, Monday – Friday.
 - Suitable age group: mainly Year 10, older students welcome.
 - Registration of interest for 2024 opening: 4th September 2023.
 - Find out more: <https://atadastral.co.uk/life-at-work>.
- *Why those 9 weeks?* From experience those 9 weeks include all the major local schools. A defined period allows us to prepare efficiently and leaves the rest of the year for all the other stuff we offer, like SEND work experience, Insights Experiences and Assembly Lectures.
 - *Why only one week?* Work experience needs a lot of volunteers and with the resources we have available we want to give as many students as possible an opportunity. Our placements are tailored to cover everything within a week.
 - *Why Monday - Friday?* The full experience starts on Monday with a Welcome briefing and an Adastral Park tour, has lots of insights visits during the week and finishes on a student presentation on Friday PM. We build weekly cohorts to make sure all students get this experience.

Insights Experience

This is a half day visit to Adastral Park where you will learn about BT, Adastral Park and Careers opportunities.

- Registration of interest: Open now.
- Read more and registration link: <https://atadastral.co.uk/life-at-work>.
- School staff with interest in booking a student group (up to 16 students + 2 staff) or a staff group, please get in touch with rika.nauck@bt.com directly. Please allow for a minimum of 6 weeks' notice.

Year 8/9 Assembly Lectures at school

A 30-minute lecture using to introduce BT and the Life@Work message as well as a STEM subject using the [British Science week material](#). If you are interested, please get in touch with rika.nauck@bt.com directly.

EARLY CAREERS

Opportunities at BT

We'll keep you updated in the autumn when more fantastic opportunities for school, college and university leavers programmes starting in Autumn 2024 become available.



MEET THE TEAM

Don't hesitate to contact our fantastic education team - they are here to help you!
email: computerscience@bt.com / rita.nauck@bt.com.



Shane Allum, Luke Johnson, Sarah Mackenzie, Penny Davies, Rika Nauck, Carol Fletcher



If you no longer wish to receive info from us, please reply with **DELETE** in the subject title and make sure you include your email address.