

**OCTOBER
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

It has been great to be back working with students and teachers again in the new term. We've enjoyed working with Y2 at skills escalator days and seeing some great coding from Y5 and 6 students at our introduction to physical computing events. We'll be adding more dates for events for all age groups for the rest of the year in future newsletters.

We'll be holding our next **Teacher Advisory Panel** meeting on **20th November, 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, Woodbridge School** and **St Joseph's College** who have kindly offered us the use of their facilities so far.

DATES FOR YOUR DIARY

Note: All our F2F Events are FREE 😊

FACE TO FACE EVENTS:

- **30th Oct 2023: TEACHER EVENT Festival of Learning - Making Tech Relevant**
- **17th Nov 2023: OUTREACH - Computational Thinking Yr3/4 at Clifford Road Primary**
- **7th Dec 2023: YEAR11+ ChristEMas Lectures**

VIRTUAL:

- **20th Nov 2023: Teacher Advisory Panel**
- **11th-15th March 2024: Virtual British Science Week**

CHALLENGES & RESOURCES

- Free Computing Education Support, Resources & CPD
- CyberFirst Girls Competition Launched

- CyberFirst University Bursary
- Raspberry Pi Foundation Resources
- First LEGO League Challenge
- Free Micro:Bits and Resources
- Pharmabees Resources
- IET Faraday® Challenge Days
- CREST Awards
- Youth STEMM Awards

PAST EVENTS & ACTIVITIES

- Introduction to Physical Computing
- Sustainability Festival Poetry Competition

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: 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



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: OUTREACH - Computational Thinking

DATE: 17th November

AVAILABLE TO: Years 3 and 4

LOCATION: Clifford Road Primary School, Ipswich IP4 1PJ

TIMES: Afternoon

PLACES: 13 students places available

Our OUTREACH programme is where we run our Events at alternative venues with the aim of giving schools local to that venue the opportunity of attending with minimum transport costs. For this Event priority will be given to schools close to Clifford Road

DETAILS: Get hands-on with a selection of activities using some of our educational robots which could include: send and receive messages with **Micro:bits**, programme **CrumbleBots** to follow a track and tinker with **Edisons** to stay in the arena. Students will practice using computational thinking processes; following instructions and writing code using different block-based programming environments.

Email computerscience@bt.com to register your interest.

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: **12 students per school**
Event is full but we can add you to Waiting List



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

DATES FOR YOUR DIARY – VIRTUAL EVENTS

TITLE: **TEACHER ADVISORY PANEL**
DATE: **Monday 20th November 2023,**
TIMES: **4pm-5.30pm**
AVAILABLE TO: **Teachers**
LOCATION: **Microsoft TEAMS**

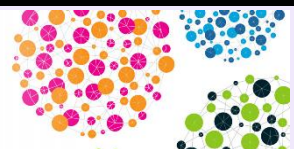


DETAILS:

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 twice a term, If you're interested joining please email computerscience@bt.com

TITLE: **VIRTUAL BRITISH SCIENCE WEEK**
DATES: **11th-15th March 2024**
LOCATION: **Online**
DETAILS:

British
Science
Week
2024



We will be hosting our Virtual British Science Week event again in 2024 where we'll be creating loads of new, FREE, online content including videos, activity packs, profile cards and much more. The content will be released between Monday 11th - Friday 15th March and this year's theme is Time. We're busy putting together loads of cool information to share with you in March and the home page will go live in January with a teaser video of what's to come!

The topics for this year are:

- **SECURITY - Social Engineering**
- **NETWORKS - 5G**

- **PEOPLE – Diversity & Inclusion**
- **CONNECTED DEVICES – Internet of Things (IoT)**
- **ARTIFICIAL INTELLIGENCE (AI) – ChatBSW**

CHALLENGES & RESOURCES

FREE COMPUTING EDUCATION SUPPORT, RESOURCES & CPD

Are you teaching Computing? Would you like free support? The Suffolk and Colchester Computer Hub is here to help and all support is completely FREE!



What is the Suffolk and Colchester Computer Hub?

We are the official DfE provider of support, resources and CPD to help schools improve confidence and skills in teaching computing. Part of the National Centre of Computing Education run by STEM Learning, funded by the DfE, and working closely with Teaching School Hubs, our dedicated staff work with you to help identify your needs and provide a targeted programme of support to help embed computing in your school.

How can we help?

FREE CPD - WITH SUBSIDIES FOR TEACHER COVER

- Courses for **ALL** Key Stages: (Courses are Live remote, Face-to-Face and On-Demand). Scheduled courses can be found on our website.
- Qualifying courses come with a [subsidy](#) to help pay for cover, go to the Teach computing website.
- See a course you like but can't make the date or maybe you would like to host a course for you and your local schools – get in touch we are more than happy to work with you
- Courses and support for specialist, non-specialist or underconfident teachers of computing

Local face-to-face courses: <https://suffolkcomputinghub.edlink.uk/courses/>

Full national offer of live remote courses: <https://teachcomputing.org/courses>

FREE SELF EVALUATION TOOL – THE COMPUTER QUALITY FRAMEWORK (CQF) (LEADS TO THE COMPUTING QUALITY MARK)

- A FREE and easy to use [tool](#) that helps you identify your strengths and weaknesses and create an action plan. Visit - computingqualityframework.org
- The [CQF interactive tool](#) creates a 360 degree image of your current position, and progress towards the Computing Quality Mark (CQM)
- Identifies tools and resources to support your specific needs
- On completion you can apply for the Computer Quality Mark (FREE)

FREE LOAN OF PHYSICAL COMPUTING KIT

- Physical computing can help bring the curriculum to life so why not borrow some kit for FREE

- Crumbles, PICOs, Raspberry Pi's, Micro:Bits, BeeBots, Robots (Crumble and Micro:Bit), Lab:Kit for the Micro:Bits
- Book loan kit via <https://suffolkcomputinghub.edlink.uk/physical-kit-booking/>

DIRECT SUPPORT

Would you like to have a chat about your computing curriculum needs? Send us a message via teachcomputing@easterneducationgroup.ac.uk and we would be more than happy to help

NOT YET OFFERING COMPUTING AT GCSE AND NEED SUPPORT?

Subsidies and fully funded Subject Matter Expert consultancy to develop an action plan for your school to offer Computer Science GCSE in the next academic year. See more at teachcomputing.org/funding

LOOKING TO SUPERCHARGE YOUR GCSE and A-LEVEL PROVISION THROUGH A DEDICATED ONLINE PLATFORM?

Visit [ISAAC Computer Science](https://isaac-computing.com): The free online platform for students and teachers - for homework, revision and students events tailored to your exam board

ENCOURAGING GIRLS INTO COMPUTER SCIENCE?

Visit the [I Belong page](https://teachcomputing.org/ibelong) on teachcomputing.org, and book courses and download resources

LOOKING TO GET YOUR STAFF ACCREDITED? AWARDED BY BCS, THE CHARTERED INSTITUTE FOR IT

- [Key stage 3 and 4 Subject Knowledge Certificate](https://teachcomputing.org/subject-knowledge-certificate)
- [Key stage 1 and 2 Teach Primary Computing Certificate](https://teachcomputing.org/primary-computing-certificate)

Visit [Teachcomputing.org](https://teachcomputing.org) for the full national offer of courses and resources. For a friendly chat to help identify how we can support you, drop us a line at teachcomputing@easterneducationgroup.ac.uk

CYBERFIRST GIRLS COMPETITION LAUNCHED

Only 17% of the cyber security workforce are women. That's why we are so excited to be involved in this year's **#CyberFirst** Girls Competition to get more girls into tech.

Year 8 girls in England and Wales, S2 in Scotland and Year 9 in Northern Ireland will team up to take on challenges, from cryptography and logic to artificial intelligence and networking, to win great prizes and be crowned Regional girls' competition champions.

If you know any girls that might be interested, or you know somebody who works in education, tell them about the competition and let's get more girls into tech!

Learn more and enter at: <https://www.ncsc.gov.uk/cyberfirst/girls-competition>



CYBERFIRST UNIVERSITY BURSARY

BT are proud partners of #CyberFirst and their University Bursary – aiming to get more women into cyber to break down the barriers women face. So, if you know a female who is applying for university in 2024 or in the first year of their degree, encourage them to apply for the CyberFirst University bursary.



CyberFirst gives real-world work experience, helps make connections and try new things. Like different career paths with different companies. To see where tech or non-tech roles in cyber security could take

you. All while belonging to a community where you feel supported. And financial support while you study – regardless of what you study.

Successful students could get up to £24K in funding. For any subject, at any UK university. While working with the biggest names in tech each summer.

They will build skills, confidence and their professional network to set them up for success in the cyber security world.

It's a fantastic opportunity that we're passionate about: <https://www.gchq-careers.co.uk/cyberfirst.html>

BT is a Proud Partner of CyberFirst!

RASPBERRY PI FOUNDATION IT'S CYBERSECURITY AWARENESS MONTH



Issue 18 of Hello World contains info on how we can teach Cyber Security in schools plus an intro to quantum cryptography, and more. Download your free copy at [Hello World issue 18 — Hello World \(raspberrypi.org\)](https://www.hello-world.org/issue-18)

Also, Raspberry Pi have launched a “secret agent chat! Project – the perfect way to teach students about staying safe in the digital world while having fun together.

Using Python, students learn how to create an encryption technique known as the one-time pad. This method of encryption will allow them to send secret messages to their friends and, as long as they have been careful the messages will be unbreakable.

Get started [Secret Agent Chat | Python | Coding projects for kids and teens \(raspberrypi.org\)](https://www.raspberrypi.org/secret-agent-chat)

FIRST LEGO LEAGUE CHALLENGE

First Lego League is a global STEM competition for students aged 9-16 which develops key skills for future careers, including coding, design, research and teamwork. You can [find out more here](https://www.firstlegoleague.com), as well as register your school to receive a challenge pack and/or enter a team at one of the regional events which are happening across the UK.

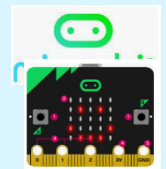
For those in the East of England, we'll be hosting a regional final at Adastral Park on **26th March 2024**.



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/](https://microbit.org/teach/featured/)

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](#)



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 started in September 2023 and run right through to June 2024. For more information please visit: [IET Faraday Challenge Days \(theiet.org\)](#).

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!



PAST EVENTS & ACTIVITIES

Introduction to Physical Computing 3rd/4th October – Adastral Park

In early October we welcomed 197 Year 5 and 6 students from 14 schools, as far away as Southend and



Cambridge. Across 2 days of physical computing events they coded Micro:bits to send and receive messages, programmed CrumbleBots to follow a track, tinkered with Edison Robots to stay in the arena and were inspired by a tour of our Showcases.

Sustainability Festival Poetry Competition

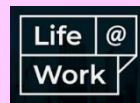
A huge thank you to everyone who entered our sustainability poetry competition. WE had some creative and thought-provoking entries. We're delighted to announce that our winning entry was from



Coldfair Green Primary School, and our runner-up from **St Mary's Junior School Cambridge**. Other finalists were from **Great Barton Primary Academy, Morland CE Primary School, St Mary's Junior School Cambridge, Eyke Primary** and **Woodbridge School Prep**. We'll be sending out certificates to all schools who took part.

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>.
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- *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

Applications for next year are opening up now. For all Apprentices & Graduate Opportunities please visit:

[Graduates & Apprentices - Early careers - Careers | BT Plc](#)



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.