FEBRUARY 2024	EDUCATION & SKILLS NEWSLETTER	(Adastral Park
BT 'STEAM for Good' STEAM STEAM DUCATION https://atadastral.co.uk/	This Adastral Park Education & Skills Newsletter brings you the to member of our education & skills team in one place – celebrad industry collaborations. The Adastral Park Team support different student needs from running events to create STEAM [Science, Tengineering, the Arts and Maths] interest in young people, to p industry encounters, through to work experience and careers f Don't forget to make the most of the virtual content available: <u>https://atadastral.co.uk/education-skills</u> , Please forward this Newsletter onto all Science, Technology, Err Teachers in your school. If this email has been forwarded onto than us but you would like to receive the info directly, please encomputerscience@bt.com with your email address and schoo our mailing list.	ting our schools and nt aspects of school and Technology, providing meaningful airs. It that we have L ngineering, Arts & Maths you by someone other email:
INTRODUCTION		

We're almost halfway through the academic year and looking forward to events and activities still to come. **British Science Week** is fast approaching, and we're delighted to have again worked with partners from industry and academia to bring you 5 fascinating topics over 5 days, showing how STEM impacts our lives every day. You can see details of all the upcoming events in this newsletter, including **Introduction to Physical Computing for Y5/6** in April and **Technology Day** for Yr10 & Yr12 in June.

We'll be holding our next **Teacher Advisory Panel** meeting on **13th May at 4pm via Teams**, please email us at <u>computerscience@bt.com</u> 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 up to 60 students at a time, please let us know (email <u>computerscience@bt.com</u>). A huge thank you to Clifford Road Primary, West Suffolk College, Wickham Market Primary, Woodbridge School, St Joseph's College and Broke Hall Primary who have kindly offered us the use of their facilities so far.

DATES FOR YOUR DIARY

FACE TO FACE EVENTS: Note: All our F2F Events are FREE 😊

11th & 12th March: Big Free CPD for Teachers – Adastral Park
16th & 17th April 2024: Introduction to Physical Computing Years 5 & 6 – Adastral Park
13th June 2024: Technology Day Years 10-13 – Adastral Park
Various Dates: Skills Escalator Days Year 2 – Various locations

VIRTUAL:

- 11th-15th March 2024: Virtual British Science Week
- 13th May 2024: Teacher Advisory Panel
- 14th May 2024: World of Work Event

CHALLENGES & RESOURCES

- Suffolk STEM Activities Coderus Life App
- CyberFirst Investigators Challenge
- Cyber Explorers Cup

- Raspberry Pi Foundation Resources European Astro Pi Challenge
- NCCE I-Belong: Encouraging Girls into Computer Science
- NCCE Primary & Secondary Enrichment
- Free Computing Education Support, Resources & CPD
- Colchester Zoo STEM Design Challenge
- British Science Week Activity Packs & Poster Competition
- Youth STEMM Awards
- CREST Awards

PAST EVENTS & ACTIVITIES

• Outreach Computational Thinking at Woodbridge School

CAREER & LIFE AT WORK

- Insights Experience
- Work Experience

EARLY CAREERS

• Opportunities at BT

DATES FOR YOUR DIARY – FACE TO FACE EVENTS

TITLE:	BIG FREE CPD
DURATION:	2 days
DATES:	Tue 11 th & Wed 12 th March 2024
TIMES:	9.30am-4pm
AVAILABLE TO:	Teachers
LOCATION:	Adastral Park, Martlesham Heath, IP5 3RE

Castern Education GROUP

DETAILS:

- We're delighted to announce **two full days of mix-and-match CPD** for schools across all phases at....And, it's COMPLETELY FREE TO ATTEND
- Edtech, Chat GPT (AI) & Multimedia to Improve Learning in Any Subject
- Supercharge Your Computing Teaching and Curriculum

Book Now! Thebigcpd.edlink.uk

Click to see some of the Edtech Digital Tools used across the curriculum

TITLE: DURATION:	INTRODUCTION TO PHYSICAL COMPUTING 1 day			
DATES:	Tue 16th or Wed 17th April 2024	A CONTRACT		
TIMES:	9.30am-3pm			
AVAILABLE TO:	Years 5 and 6			
LOCATION:	Adastral Park, Martlesham Heath, IP5 3RE			
SPACES:	15 students per school			
PREREQUISITES:	ScratchJr/Scratch/Blockly Programming knowledge - very useful	JI		
DETAILS:				
Introduction to programming using different programming environments.				
Get hands-on with a selection of activities using some of our educational robots: 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.

If you would like to make a booking, please email <u>computerscience@bt.com</u> If you have a preferred date let us know

TITLE:	TECHNOLOGY DAY	
DATES:	Thursday 13th June 2024	
TIMES:	9.30am-3pm	TE
AVAILABLE TO:	Years 10+	/
LOCATION:	Adastral Park, Martlesham Heath, IP5 3RE	
PREREQUISITES:	Students who are interested in pursuing a career in STEM subj	jeo
SPACES:	10 students per school (more spaces maybe available)	
DETAILS:		

Students will visit a number of zones around Adastral Park, covering topics such as Networks, Cyber Security, AI, Digital Manufacturing, Robotics & Drones, Health, Sustainability, Interactive & Immersive Content as well as Careers & the World of Work. Each zone will have short talks plus hands-on activities. Many of our graduates and apprentices from across BT will be helping to host the exhibits across Adastral Park and in the Digitech Centre (a collaboration with the University of Suffolk including a dedicated building at Adastral Park). This is a great opportunity for students to seek advice on future studies and career options.

If you would like to book your place, please email <u>computerscience@bt.com</u>

SKILLS ESCALATOR DAYS (SED) - YEAR 2

For more information on what the SED days are click here

The Schools Team will be particpating at these SED Events:

- Thefford, Year 2, Thurs 9 May & Fri 10 May
- Ipswich (Suffolk ONE), Year 2, Mon 8 & Tues 9 July
- Ipswich (West Suffolk College) Fri 12 July

There are also Events at Mildenhall, Haverhill, Sudbury & Chatteris - detail of all dates & locations and how to book your place can be found <u>here</u>

DATES FOR YOUR DIARY – VIRTUAL EVENTS

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

DETAILS: 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 daily on Monday 11th to 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 but the **home page** is now **LIVE** so have a look at what's to come!

The topics for this year are:

- SECURITY Social Engineering
- NETWORKS 5G
- PEOPLE Diversity & Inclusion





HNOLOGY DAY

cts

THE **Skills**

- CONNECTED DEVICES Internet of Things (IoT)
- ARTIFICIAL INTELLIGENCE (AI) ChatBSW

Teachers

Online Teams

TITLE: DATE: TIMES: **TEACHER ADVISORY PANEL** Monday 13th May 2024 4 - 5pm



AVAILABLE TO: LOCATION:

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: DATES: TIMES: SUITABLE FOR: LOCATION:

WORLD OF WORK EVENT Tuesday 14th MAY TBC but will be in the morning for 90mins Year 5/6 Online



DETAILS:

World of Work - how do we use technology to do our jobs? what does an office or a lab or a workplace look like? Sign-up to this virtual event where we will be giving you sneak peak into the world of work at Adastral Park

If you would like to book onto this event, please email computerscience@bt.com

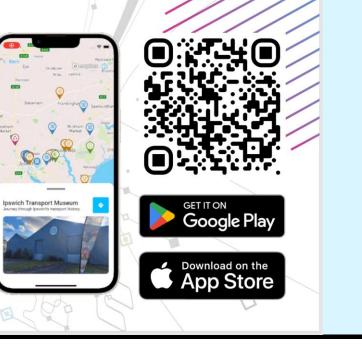
CHALLENGES & RESOURCES



Need some half term inspiration?

Check out the interactive Suffolk map full of STEM related locations all over Suffolk on the Coderus Life app, available on iOS and Android.

Scan the QR code to experience it, or search for Coderus Life today!



CYBERFIRST INVESTIGATORS

Cyber security is part of our daily lives – keeping music streaming, protecting gaming and online banking, and even helping to keep the power on in our homes. There's never been a better time to explore what a career in cyber security has to offer. Inspired and led by the National Cyber Security Centre (NCSC), a part of GCHQ, CyberFirst is on a mission to make cyber security as accessible as possible. **Rise up**

to the challenge with CyberFirst Investigators. Year 8/9 students can join CyberFirst Investigators for a fun, scenario-based, interactive learning experience. Hear from inspirational guest speakers and trailblazing leaders working in the cyber industry.

Sat 9th March – Canterbury Sat 16th March – Leicester Sat 23rd March – IPSWICH

For more information click here

CYBERFIRST: Cyber Explorers Cup

Opportunity for UK Schools: Give your 11-14-year-old students a unique chance to shine in a cyber security competition this March. The Cyber Explorers Cup will not only challenge their digital prowess but also offers the winning school an enriching

half-day careers event with industry professionals. Secure your team's spot now

Read more <u>here</u> but be quick – deadline is 29th February 2024!

RASPBERRY PI FOUNDATION

The European Astro Pi Challenge 2023/24 launched!

Find out how to run your very own code in space with the European Astro Pi Challenge. New to coding? Mission Zero is right for you. Advanced coders can level up with an all-new Mission Space Lab.

The European Astro Pi Challenge offers young people the amazing opportunity to conduct scientific investigations in space by writing computer programs that run on Raspberry Pi computers aboard the International Space Station (ISS)

Read more <u>here</u>. Entries for <u>Mission Zero 2023/24</u> are now open until 25 March 2024. Free <u>Resources</u>

I BELONG: ENCOURAGING GIRLS INTO COMPUTER SCIENCE

Computer science is the fastest-growing STEM subject, and yet, despite its popularity, girls are consistently outnumbered by

boys. In 2023, only one in five GCSE Computer Science and 15% of all A level Computer Science entries were from female students in England.

This 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.



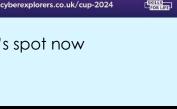
Helping students explore their passion for computers and technology and introducing them to the fascinating world of cyber security.

K Government

Cyber Explorers Cup

FREE COURSES running in March 2024









We offer curated resources, training and implementation support to empower you with the tools to support more girls into computer science qualifications and careers.

For more information visit: <u>https://teachcomputing.org/i-belong</u>

PRIMARY & SECONDARY ENRICHMENT

Explore a variety of activities, challenges and opportunities provided by the National Centre for Computing Education

(NCCE) and our partners. All are designed to enrich learning in computing and provide opportunities to broaden young people's educational experience, inspire their curiosity and expand on what computing means to them in a fun hands-on way.

For Primary Enrichment visit: <u>https://teachcomputing.org/primary-enrichment</u> For Secondary Enrichment visit: <u>https://teachcomputing.org/secondary-enrichment</u>

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 <u>subsidy</u> 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: <u>https://suffolkcomputinghub.edlink.uk/courses/</u> Full national offer of live remote courses: <u>https://teachcomputing.org/courses</u>

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

- A FREE and easy to use <u>tool</u> that helps you identify your strengths and weaknesses and create an action plan. Visit computingqualityframework.org
- The <u>CQF interactive tool</u> 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 <u>teachcomputing@easterneducationgroup.ac.uk</u> 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 <u>ISAAC Computer Science</u>: 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 <u>I Belong page</u> 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
- <u>Key stage 1 and 2 Teach Primary Computing Certificate</u>

Visit <u>Teachcomputing.org</u> 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 <u>teachcomputing@easterneducationgroup.ac.uk</u>

COLCHESTER ZOO STEM DESIGN CHALLENGE

The Colchester Zoo STEM Design Challenge is a FREE project offering students from KS1-KS4 the chance to solve real-world problems faced by zookeepers and staff at Colchester Zoo. Students will redesign an animal enclosure following the STEM design process.

https://www.colchester-zoo.com/plan-your-visit/schools-groups/education/otheropportunities/stem-design-challenge/

BRITISH SCIENCE WEEK ACTIVITY PACKS & POSTER COMPETITION

In addition to our very own BSW Activity Packs which will soon be launched on our <u>website</u>, free <u>activity packs</u> for British





Science Week 2024 are available to download now, there is an Early Years pack, Primary pack and Secondary pack. The theme for 2024's packs and <u>poster competition</u> is 'Time' and the packs provide fun and engaging ways to introduce this theme to the children.

https://www.britishscienceweek.org/

YOUTH STEMM AWARDS

The <u>Youth STEMM Award</u> 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 <u>Youth STEMM Award Juniors</u> 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!

Remember you can count your time spent on our Virtual British Science Week, towards your Youth STEMM Award!

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

PAST EVENTS & ACTIVITIES

Outreach Computational Thinking – Woodbridge School

On Friday 2nd February, we spent the day running Computational Thinking workshops at Woodbridge School. These were attended by >100 Years 3-6 pupils from St John's

CoE Primary School, St Mary's Catholic Primary School, Waldringfield Primary School & Melton Primary School, split over two sessions: morning and afternoon.

There was lots of great energy in the room as students cracked on with getting their Edison robots to follow a road and coded their micro:bits to send messages to one another. The session even gave us a chance to test out some new micro:bit activities around light, sound and temperature which we think they liked so watch out for those in future sessions.









Hopefully it has inspired more people to engage with computing, showcasing how fun it can be; we even had a few questions about where they could buy an Edison robot from!

We'd like to say another huge thank you to Woodbridge School for hosting us and supporting schools with their transport for the day. We have plenty more regional outreach sessions coming up across the rest of this academic year, so keep your eyes peeled...

CAREERS & 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.



Careers & Life at Work:

Please find general information about Work and Insights Experiences, Assembly Sessions, and T-Levels on the <u>Adastral Park Life at Work</u> page.

Insights Experience Season - Update

The end of the year is not far now and places for Insights Experiences for this academic year are booked up. 'Thank you!' to all who have already visited and we look forward to seeing those coming in February. The <u>registration form will stay open</u>, and we can take <u>enquiries via email</u> for September 2024 to February 2025 as well.

Work Experience - Update

We have received very large numbers of registration of interest. We will however keep registration open until end of March, as we allocate placements to the best matched host. Please encourage your students who have registered to watch their email accounts from now until Easter. Students please be reminded as well, that they need to accept the offer by responding to the email to secure the placement.

EARLY CAREERS

Opportunities at BT

Applications for September 2024 entry are open now. In particular, based at Adastral Park, we have:

- Degree Apprenticeships (Level 6) in Software, Networks and IT
- Chartered Manager Degree Apprenticeships and
- Level 4 Network Engineer Apprenticeships

Follow this link for more information.

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: <u>computerscience@bt.com / rita.nauck@bt.com</u>.



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