

DECEMBER  
2023

EDUCATION &  
SKILLS  
NEWSLETTER



Adastral Park



'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/education-skills/>

*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](mailto:computerscience@bt.com) with your email address and school and we'll add you to our mailing list.*

## INTRODUCTION

As the end of term approaches rapidly, it's time to look back on the successes of last term and look forward to 2024. Since September, we've worked with teachers and students from year 2 to year 13, exploring topics from the basics of computing to generative AI and lots in between. We've had some great feedback and also some really useful and constructive suggestions on how to improve what we do. Our **Teacher Advisory Panel**, which was new for this term, has been invaluable and I'd like to thank them all for sharing their wisdom, time and energy with us. We'll be holding our next **Teacher Advisory Panel** meeting on **22nd January, 4pm via Teams**, please email us at [computerscience@bt.com](mailto: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.

We've also streamlined our **website**, which you can [check out here](#).

Looking forward to 2024, we have more events in planning, including Virtual British Science Week in March and Technology Day in June.

### **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](mailto: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.

## LAUNCH OF OUR NEW EDUCATION & SKILLS WEBSITE!

We have reviewed, updated and streamlined our Education & Skills Webpages to make them easier to navigate and drill down to find out more information on a number of topics and subjects. We now have six tiles on our front screen, and we encourage you and your students to view all the exciting and interesting material available

## Education & skills



### Newsletters

This Adastral Park Education & Skills Newsletter brings you the top-level news from each member of our education & skills team in one place. See the latest information on:

- Face-to-face and online events
- Links to lots of other resources
- Life at work & work experience

[Learn More >](#)



### Previous online events

Take a look through some of our previous virtual events, including British Science Weeks, which are packed full of exciting online content including videos, activity packs, profile cards, Q&As and loads more!

[Learn More >](#)



### STEM videos

Explore our selection of STEM-based videos, from topics such as Artificial Intelligence (AI) to Wi-Fi with some holograms and a bit of quantum sprinkled in for good measure.

[Learn More >](#)



### Teacher zone

Here you will find online resources that will enable you to support STEM related lessons, continue your own personal development and opportunities to engage your students.

[Learn More >](#)



### Life at work experiences

Transitioning from school to work is one of the biggest steps we have to take in life. What if you could meet apprentices and graduates who have just done this, encounter a work place for real and find out more about BT and Adastral Park at the source? Have a look at our Work and Insights Experience options and register interest.

[Learn More >](#)



### Careers

Find out about opportunities for apprenticeships and graduate careers at Adastral Park. Get some top tips on how to prepare for online and face-to-face interviews.

[Learn More >](#)

Check it out at: <https://atadastral.co.uk/education-skills/>

## DATES FOR YOUR DIARY

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

**16<sup>th</sup> & 17<sup>th</sup> April 2024: Introduction to Physical Computing Years 5 & 6**

**13<sup>th</sup> June 2024: Technology Day Years 10-13**

### VIRTUAL:

- **22nd January 2024: Teacher Panel**
- **11<sup>th</sup>-15<sup>th</sup> March 2024: Virtual British Science Week**
- **14<sup>th</sup> May 2024: World of Work Event**

## CHALLENGES & RESOURCES

- Youth STEMM Awards + Sudbury Ormiston Academy Success Story
- Free Computing Education Support, Resources & CPD
- CyberFirst Resources
- Raspberry Pi Foundation Resources - European Astro Pi Challenge
- First LEGO League Challenge
- Lego Fun Day – 13<sup>th</sup> Jan Woodbridge School
- CREST Awards
- Suffolk Libraries Blank Page: Winter Programme 21<sup>st</sup>-29<sup>th</sup> Dec 23

## **PAST EVENTS & ACTIVITIES**

- Outreach at Clifford Road
- Outreach at WB Library
- ChriSTEMas at Adastral Park

## **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 16th or Wed 17th April 2024**

**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**

**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 register your interest, please email [computerscience@bt.com](mailto:computerscience@bt.com)



**TITLE: TECHNOLOGY DAY**

**DATES: Thursday 13th June 2024**

**TIMES: 9.30am-3pm**

**AVAILABLE TO: Years 10+**

**LOCATION: Adastral Park, Martlesham Heath, IP5 3RE**

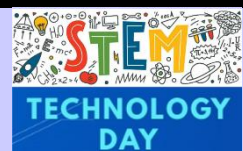
**PREREQUISITES: Students who are interested in pursuing a career in STEM subjects**

**SPACES: 10 students per school**

**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 register your interest, please email [computerscience@bt.com](mailto:computerscience@bt.com)



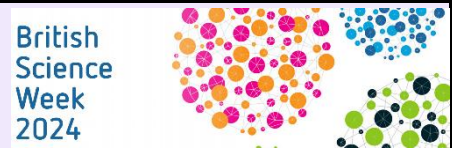
## DATES FOR YOUR DIARY – VIRTUAL EVENTS

TITLE: **TEACHER ADVISORY PANEL**  
DATE: **Monday 22<sup>nd</sup> January 2024**  
TIMES: **4pm-5.30pm**  
AVAILABLE TO: **Teachers**  
LOCATION: **Online 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](mailto:computerscience@bt.com)

TITLE: **VIRTUAL BRITISH SCIENCE WEEK**  
DATES: **11<sup>th</sup>-15<sup>th</sup> March 2024**  
LOCATION: **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 between Monday 11<sup>th</sup> - Friday 15<sup>th</sup> 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**

TITLE: **WORLD OF WORK EVENT**  
DATES: **Tuesday 14<sup>th</sup> MAY AM 90mins**  
TIMES: **TBC but will be in the morning for 90mins**  
LOCATION: **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? check out this virtual event where we will be giving you sneak peak into the world of work at Adastral Park?

## CHALLENGES & RESOURCES

### YOUTH STEMM AWARDS



It's always great to hear if our school connections are successful when applying to opportunities we publicise in the newsletter. One such example is from **Sudbury Ormiston Academy** who have signed up to the Youth STEMM awards – as well as successfully securing funding from the **Babraham Institute** for the main registration fee and 20 participant fees! Ellice-Rose Cooke, Teacher of Design and Technology at Sudbury Ormiston Academy said, "This is a fantastic opportunity that BT have suggested, I am very grateful to be working alongside some great people at Babraham and I can't wait to get started in the new year."

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!



## 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](https://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](mailto: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](http://teachcomputing.org/funding)

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

Visit [ISAAC Computer Science](#): 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](#) 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](#)
- [Key stage 1 and 2 Teach Primary Computing Certificate](#)

Visit [Teachcomputing.org](http://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](mailto:teachcomputing@easterneducationgroup.ac.uk)

### **CYBERFIRST RESOURCES FROM THE NATIONAL CYBER SECURITY CENTRE**

Young people are growing up in an increasingly digital world, exposing them to both the opportunities and risks of the internet.



[CYBER SPRINTERS](#) is an exciting new interactive online security resource for **7-11 year olds**, empowering them to make smart decisions about staying secure online. The digital game can be played on phone, tablet and desktop, and is supported by a suite of activities to be led by educational practitioners. Parents and carers can also try the CyberSprinter puzzles with their children at home!

[CYBER NAVIGATORS](#) for **11-14 year olds**, highlights some of the most common cyber scams and malicious activity that a pre-teen and teenage internet user might come across and empowers them to make choices to keep themselves more secure online.

**BT is a Proud Partner of CyberFirst!**

## 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 [here](#). Entries for [Mission Zero 2023/24](#) are now open until 25 March 2024. Free [Resources](#)

## 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](#), 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**.





WOODBRIDGE  
SCHOOL

# LEGO FUN DAY

WITH A BRICKOFF CHALLENGE  
SUPPORTED BY THE BRICKOLOGISTS

SATURDAY 13 JANUARY 2024

BRICKOFF LEGO CHALLENGE WITH PRIZES FOR THE BEST MODELS

LEGO 'FREE BUILD' AREA > LEGO BIONICLES AREA

DUPLO AREA > LEGO BUILDING (WITH INSTRUCTIONS)

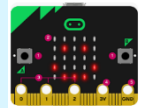
LEGO CAR BUILDING AND DOWNHILL RACE TRACKS

MINI FIGURE HUNT WITH SMALL PRIZES

TO BOOK YOUR PLACE PLEASE CONTACT:

PRIMARY\_ENRICHMENT@WOODBRIDGESCHOOL.ORG.UK

## FREE MICRO:BITS



**Last chance to claim.** Applications are open until 18<sup>th</sup> December 2023. One application per school. Visit [microbit.org/thenextgen-registration/](https://microbit.org/thenextgen-registration/).

## 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](#)

## **BLANK PAGE: WINTER PROGRAMME**

**Thu 21<sup>st</sup>-Fri 29<sup>th</sup> Dec 2023**

**SUFFOLK  
LIBRARIES**

Get involved in free creative activities for 10-16 year olds taking place at various libraries throughout the winter holidays. Part of our Blank Page programme providing free high-quality creative activities run by local artists. Read more [here](#)

## **PAST EVENTS & ACTIVITIES**

### **OUTREACH WOODBRIDGE PRIMARY SCHOOL/WOODBRIDGE LIBRARY COLLABORATION**

A Robotics morning captured the imagination of pupils from Woodbridge Primary School on Thursday 23rd November. The BT Education team from Adastral Park, hosted the event in Woodbridge Library, bringing together school and business into the community.

The children discussed what they thought robotics was all about, what robots look like, what sort of jobs robots can do and what they would like them to do! After busily creating some brilliant pictures to describe their robots, the pupils worked in pairs to learn to programme "Edison" robots and "Micro:bits".

Learning how to create algorithms in each of the programming languages, the pupils soon picked up on how to make their robot's lights flash; turn in different directions; make sounds; travel along different distances and create moving messages in light sequences!

Teacher, Chloe Nicolson said, "The children and staff had such a fantastic morning - we all learnt so much and all the children were really fully engaged for the whole session. We completed our Robot pictures on Friday and I then asked the children to draw a new picture/pictures of what they thought robots looked like now". The school are already arranging a follow up session.

Helen Scrivener, Executive Library manager at Woodbridge Library said, "it was fantastic to host the morning's session with Woodbridge Primary School and BT. We enjoyed watching and listening to all the pupils learning about robotics and getting creative. The floor space in the children's library certainly came alive with the moving robots! We hope to welcome them all back again soon."

### **OUTREACH - CLIFFORD ROAD PRIMARY SCHOOL**

On Friday 17th November, we spent the day running Computational Thinking workshops at Clifford Road Primary School in Ipswich for year 3 and 4 pupils. These were attended by almost 80 students from Clifford Road, Sandlings, Hintlesham & Chattisham and St Joseph's Dovercourt Primary Schools split over two sessions: morning and afternoon.

After some connectivity issues to begin with, we were undeterred and adapted our plans to ensure we could still put on a great day of coding Micro:bits. It even ended with us setting a challenge to create their own Christmas song with the Micro:bits –

much fun was had, there was some serious creativity and I'm sure some future number 1 hits were created that afternoon!

We'd like to say another thank you to Clifford Road Primary School for allowing us to use their facilities as a venue and we'll be running more of these regional outreach sessions across the county in the new year!

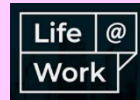
## **CHRISTEMAS at ADASTRAL PARK**

On 7<sup>th</sup> December we welcomed over 140 year 11, 12 and 13 students from Suffolk, Norfolk and Essex to Adastral Park to our annual ChriSTEMas lectures, Kicking off with a talk of how AI is transforming software from Joost Noppen, the students toured the showcases, heard from UoS lecturer Anousha on how she is using AI in her research, saw an array of demos from across Adastral in our expo and quizzed our early careers panel.



## **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 [Adastral Park Life at Work](#) 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 I already had the pleasure of hosting, and who I am still looking forward to meeting in January and February. We already had a fabulous season so far. The [registration form will stay open](#), and I will take [enquiries via email](#) for September 2024 – February 2025 bookings as well.

### **Work Experience - Update**

Not long now and I will start preparing for the Work Experience season. I would like to remind you, though, that due to the way we work at Adastral Park, our volunteers often cannot commit too early on. This is the reason for our confirmations of placements not taking place before Easter.

I understand that this is putting pressure on the students, the parents, and the schools. We however completely rely on our volunteering colleagues to deliver those fantastic

opportunities to your students, so please bear with us.

### **A very Merry Christmas and Happy New Year!**

For now, I wish you all a relaxed festive season, a very Merry Christmas and a Happy New Year!

Rika

## **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](mailto:computerscience@bt.com) / [rita.nauck@bt.com](mailto: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 text and make sure you include your email address.