CyberFirst Schools & Colleges North West

Programme Guide
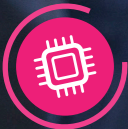
National Cyber Security Centre

IN4.0™ Group

CONTENTS

WELCOME TO CYBERFIRST NORTH WEST

CyberFirst Schools & Colleges is an initiative from the National Cyber Security Centre (NCSC), a part of GCHQ, that aims to ensure the UK has a sustainable supply of diverse and high-quality individuals joining the cyber workforce of the future.

Delivered by IN4 Group in the North West, CyberFirst strives to equip young people with the digital awareness and skills they need to enable them to pursue a career path in the cyber sector.

A major objective of the North West initiative is to encourage girls to take an interest in technology during their school years, with the aim of engaging over 500 schools from across the region in the next two years.

This is part of a bigger ambition to ensure that local young people have the desired skills needed for the thousands of job opportunities in cyber security, technology, and intelligence in the coming years – thanks to the National Cyber Force's move to Lancashire and its £5 billion investment into the region being a significant step in creating a 'cyber corridor' across the North of England.

2022-23

From the £610,895 invested into CyberFirst, our work across the North West has created **£1.6m** of social impact.

For every £1 invested, there has been a **£2.57** Social Return on Investment (SROI).

£1.6m
Social Value

£2.57
Social Return on Investment

National Cyber Security Centre

"Developing a diverse cyber workforce is vital for ensuring the UK remains safe online, and we are committed to removing barriers so young people can pursue careers in the field. I am delighted to see the positive impact our CyberFirst initiative is having in the North West – recognising schools for the very best in cyber education and helping pupils develop valued tech skills.

Working with IN4 Group, I look forward to seeing the programme grow across the region, paying dividends for the local ecosystem and contributing to our national cyber resilience now and into the future."

Lindy Cameron, Chief Executive
National Cyber Security Centre

ABOUT
IN4 GROUP

IN4.0™ Group

IN4 Group is an award-winning technology group, driving prosperity for businesses and communities. It delivers a unique technology talent acquisition solution, unlocking the potential from within diverse and disadvantaged communities, this is mapped into organisations that are scaled through its innovation hubs and programmes. Ensuring fair access to technology futures for all.

HOST
Home of Skills & Technology

The Group operates HOST, the Home of Skills & Technology, one of the North West's most established innovation hubs in MediaCity, Salford. It offers five floors of innovation services, training and facilities including the UK's first Multi-access Edge Compute (MEC) lab with Vodafone, and support for people and businesses alike, from start-ups and SMEs through to enterprises and the public sector.

MEET OUR TEAM

CyberFirst North West Lead

Lauren Monks
Director of Careers Education Programmes
lauren.monks@cyberfirstschools.co.uk

CyberFirst Days

Brad Dowling
Senior Programme Delivery Manager
brad.dowling@in4group.co.uk

CyberFirst Recognition for Schools & Colleges

Suzie Short
Senior Programme Manager
suzie.short@in4group.co.uk

CyberFirst Programme Admin

Alanna Burns
alanna.burns@in4group.co.uk

OUR INDUSTRY PARTNERS

We work in collaboration with industry partners to offer a bespoke and enriched experience for young people.

Our renowned industry partners are often present at CyberFirst Days and Empower events. STEM ambassadors and graduates representing these multinational organisations from tech, cyber and defence attend sessions to deliver engaging activities and motivational careers talks to inspire the next generation of tech talent.

948 dedicated volunteer hours from Apex Partners

2213 total hours dedicated to CyberFirst North West

Apex Partners

- IBM
- KPMG
- NORTHROP GRUMMAN
- QINETIQ
- BT
- ROKE

Strategic Partners

- University of Central Lancashire UCLan
- MANCHESTER 1824 The University of Manchester
- Edge Hill University
- Lancaster University
- University of Salford MANCHESTER
- Manchester Metropolitan University
- Salford City Council
- THE CAREERS & ENTERPRISE COMPANY
- GMCA GREATER MANCHESTER COMBINED AUTHORITY
- Lancashire Enterprise Partnership

"A well-documented challenge that schools face is educating young people on the many and diverse career options available to them, outside of more traditional industries, and they can't do it alone. We've seen a fantastic response to the CyberFirst initiative so far, and we're hoping the number of schools becoming accredited will continue to rise.

We're proud to be working with CyberFirst in the North West to help pupils learn more about the career possibilities of the subjects they have a clear passion for. Together, we must help ensure the cyber and technology jobs of tomorrow are in high demand. It's crucial pupils are given as much information as possible at this important juncture."

Warren Middleton, Manchester office Senior Partner KPMG UK

"BT Security is delighted to have been working in partnership with CyberFirst North West. Across BT Group, we are committed to embedding diversity and inclusion into everything that we do, it remains fundamental to our purpose: we connect for good.

Through our Apex partnership and powered by our employee volunteers, we have been able to raise the aspirations of young people in a way that will not only positively impact the UK's digital skills agenda; but also engage, inspire and attract a new, diverse and exciting talent pool into the North West cyber ecosystem."

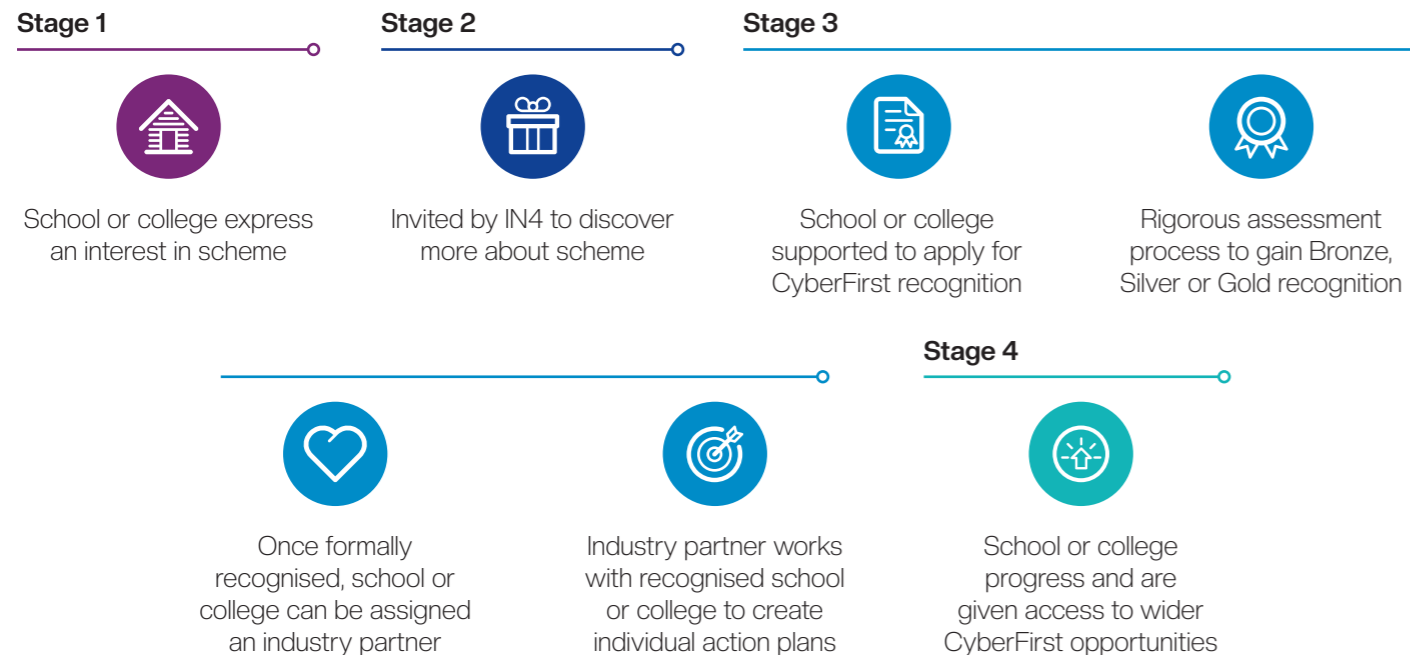**Laura Price, Employer Brand & Strategic Partnerships BT Security**

IBM®

"We feel immensely privileged to be able to volunteer time supporting the CyberFirst Schools & Colleges programme. It is such a thrill to be able to inspire young people, especially those from underrepresented groups, to consider a future in tech."

Laetitia Sterling, Senior Programme Lead and Business Transformation Consultant

IBM

THE CYBERFIRST JOURNEY

Stage 1

School or college express an interest in scheme

Stage 2

Invited by IN4 to discover more about scheme

Stage 3

School or college supported to apply for CyberFirst recognition

Rigorous assessment process to gain Bronze, Silver or Gold recognition

Once formally recognised, school or college can be assigned an industry partner

Industry partner works with recognised school or college to create individual action plans

Stage 4

School or college progress and are given access to wider CyberFirst opportunities

Stage 1: Expression of Interest

School or college submits an Expression of Interest (EOI) on the IN4 Group or HOST website.

Stage 2: CyberFirst Days

School and colleges will be offered a CyberFirst Adventurer or Trailblazer Day at HOST in Media City for up to 30 students.

Stage 3: CyberFirst Recognition for Schools & Colleges

Applications for CyberFirst recognition open at various times throughout the academic year. In advance of this, we request the school or college complete a pre-questionnaire which will be sent via email. This questionnaire is to ascertain whether the institution is in a good position to be awarded Gold, Silver or Bronze status in cyber education.

When applications for CyberFirst recognition open, we notify the school or college so they can start the application and evidence process. Support is available from recorded and live webinars, 1-1 help from a dedicated CyberFirst advisor and pre-submission guidance.

Stage 4: CyberFirst Opportunities for Schools & Colleges

Schools and colleges that receive Gold, Silver or Bronze recognition are partnered with one of our Apex partners, who will create an action plan, organise activities and add overall value to existing provisions. Institutions will be connected to CyberFirst networks across the public and private sectors and receive exclusive invites, including Empower events, NCSC cyber summer camps and Christmas activities.

STAGE 1

Expression of Interest

Why complete an Expression of Interest (EOI)?

The EOI gathers the information required to register and initiate interest in CyberFirst North West

How long will it take?

5 minutes

Who has access to this information?

IN4 Group, which leads on CyberFirst North West, and the National Cyber Security Centre (NCSC)

Why do I need to do this?

This formally declares an institution's genuine interest in exploring CyberFirst opportunities

STAGE 2

CyberFirst Days

A CyberFirst Day is an immersive workplace experience designed to expose KS3 students to the future of technology and cyber security.

Innovative content, interactive debate and gamified learning will challenge initiative and spark imagination as we open students' eyes to a world of inspiring possibilities within our industry.

CyberFirst Day experiences are also available for KS2 and KS4 on an ad hoc basis.

"The CyberFirst Day in Salford was well received by the students who attended from Moor Park. I have noticed a much more engaged student body from those who attended, which shows their interest in computing improved after the visit. I would happily bring students back for another CyberFirst Day."

Moor Park High School & Sixth Form

"CyberFirst days are greatly enjoyed by our students and have fostered a desire to study IT at GCSE level."

Kingsway Park High School

We welcome schools from across the North West to HOST, Salford's Home of Skills & Technology. This innovation hub in the heart of MediaCity, home to BBC and ITV, is the ideal backdrop to enthuse students about the tangible tech opportunities available on their doorstep.

We also make ad hoc visits to schools to deliver CyberFirst Days, as well as experiences at university and industry partner facilities and exhibition venues.

Group Size: 30 Year 8 or Year 9 students (usually 100% girls, however it can be up to 50% boys, accompanied by 3 school staff)

Aligned with the academic year, CyberFirst Day experiences are available from September-July.

£

Our CyberFirst Days are free to attend. We book and pay for coaches, packed lunches and refreshments.

If you prefer to travel in school minibuses, we offer free parking and can reimburse fuel.

Vodafone MEC Lab

Example day

Prizes to be won throughout the day! Pin Badges for all participants!

A Careers Education Programme Manager will lead the day, supported by CyberFirst-trained digital technicians and an IT specialist.

We are adaptable; timings and activities can be tailored on a case-by-case basis to complement a school or college's particular needs. Course content is constantly evolving as our passionate delivery team continues to innovate.

9:45am: Arrival
Welcome and intro

10:00am: Tour of HOST

10:30am: Future Technology and Careers talk
AI Kahoot Quiz and AI ethics debate

11:15am: Workshop 1 - Digital Detective
Data Analytics/Open Source Intelligence/ GeoGuessr activity

12:15pm Lunch

12:45pm: Crack the Code
Cryptography challenges against the clock, exploring cyber security foundations

1:30pm: Gaming
Free play on PCs, Consoles and VR headsets

2:00pm: Departure
Conclusion

Why take part in a CyberFirst Day?

- Start students on an exciting path of considering which GCSEs to take and how computer science can influence career prospects

- Enable students to see that tech and cyber industries are not just for genius coders and those who excel in STEM subjects. Leadership, teamwork, communication, problem-solving, analytics, psychology, emotional intelligence, and empathy are all skills and qualities in demand

- Highlights the varied careers available either directly in technology or involving technology in the workplace

- Open students' eyes to the exciting, well-paid future careers in tech, cyber and digital available in the North West - diversifying tech's future workforce

- Students gain a strong sense of responsibility to act safely, legally and ethically

- Supports progress for the following Gatsby Benchmarks:
  - 2. Learning from career and labour market information
  - 4. Linking curriculum learning to careers
  - 5. Encounters with employers and employees
  - 6. Experiences of workplaces

- Ideal chance for careers leads and computer science leads to speak to our team about accreditations in person

- Expose students to an inspiring tech workplace in the heart of MediaCity

- Set students on a pathway through CyberFirst events and competitions available at each Key Stage

- Expose students and school staff to our renowned industry partners, forming strategic industry-academia partnerships

Gametech campus at HOST

CyberFirst Events 2022-23

29	**1562**	**95%**	**65%**	**33%**
Events facilitated	Students participated	Female representation	Ethnic minority backgrounds	Disadvantaged groups*

"The CyberFirst Advanced course allowed our students to access some realistic Cyber Education from a recognised agency. The skills they learned are not covered by the traditional curriculum but gave them the motivation to return in year 13 and work hard to achieve their dream route after college."

Winstanley College

"Just wanted to say a massive thank you again for inviting us to your event. The kids had a very eye-opening and educational experience, which I am sure they will remember for a long time to come."

Blackburn Central High School

"Seeing everybody, seeing the number of females here, and just seeing the girls come to life outside of a classroom. You try and teach them as much as you can in the classroom but bringing them to an event like this, you can see that spark happen and even if only two or three of them go into a tech career then we've done our job."

St Ambrose Barlow RC High School

*Based on the number of pupil premium participants

STAGE 3

CyberFirst Recognition for Schools & Colleges

In partnership with the National Cyber Security Centre (NCSC), IN4 Group delivers CyberFirst programmes to young people, making careers in technology more accessible and helping schools and colleges achieve a standard of recognition for their cyber commitment and education.

CyberFirst recognition aims to acknowledge those schools and colleges that are pioneering in cyber education, providing them with an official status of:

Gold (Valid for 3 years):
Delivering excellence in cyber security education

Silver (Valid for 2 years):
Delivering good standards of cyber security education

Bronze (Valid for 18 months):
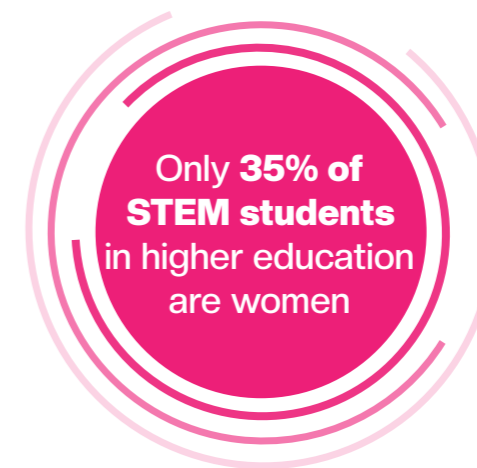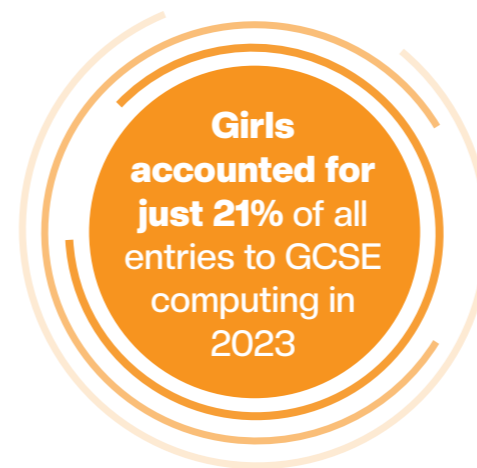Aspiring to provide excellence in cyber security education

Whichever status the school or college receives, the aim is to then continue that development and either progress to the next level or if already gold, to maintain and be a leading example in this area for future schools and colleges to aspire to.

As part of the CyberFirst recognition application, there is an opportunity to show what the school or college is doing to try and engage more young people to consider taking computer science and/or accessing a job in the cyber or tech sector.

We know there are a lot of schools and colleges that are going above and beyond to offer extra-curricular activities and support to the next generation.

Some of the key areas schools and colleges will be asked to provide information on:

- Headteacher & SLT support
- Whole school/college approach including cross-curricular engagement
- The cyber security strategy and future plans
- The core-team and how they effectively work together
- Key stage provision – KS3, KS4 and KS5 (if applicable)
- Teacher CPD
- Diversifying computer science uptake
- Enrichment activities
- Feeder schools and outreach
- Engagement with industry, education, and the wider community
- CyberFirst activities

Girls accounted for just 21% of all entries to GCSE computing in 2023

Only **35% of STEM students** in higher education are women

Just **22% of the UK's cyber security workforce** is represented by women

Benefits of CyberFirst Recognition

The benefits to schools and colleges include:

Credits towards Ofsted framework and Gatsby Benchmarks

The NCSC will credit institutions as recognised schools or colleges and provide access to unique education resources in an ever-competitive market

Schools and colleges are paired with one of our Industry Partners who will continue to work in partnership, helping to further develop and support cyber education

It's more than recognition, it's a network! We will connect institutions with 130+ partner organisations and add them to the CISSE UK cyber education community. These networks will open up new learning and work experience opportunities to students which they can't get anywhere else

An assortment of exciting and immersive events will be available from day-long seminars to inter-CyberFirst school competitions

Early and priority access to NCSC activities

The process

1 **Complete a pre-questionnaire** which takes approx. 5 minutes. This is a very short version of the full CyberFirst recognition application and allows us to check whether the school or college is in a good position to apply, in order to be successful at Gold, Silver or Bronze

2 If the school or college is deemed as being in a good position to apply, then we will share the next **application timeline**. If we feel the institution may need further development then we endeavour to work with them further in preparation for a future application

3 Once applications are open, institutions are given approximately 4 weeks to **complete the application form** and submit their evidence via email

4 In advance, and throughout the application process they will be **offered support** such as official guidance documents, webinars and 1-1 support from our CyberFirst Advisor to ensure the application hits all the requirements (where possible)

5 Once submitted, the application and evidence then goes to three assessors from academia, government and industry to **assess and grade**

6 To make sure all the grades are valid, reliable, and consistent, we **conduct moderation panels** on all applications to confirm the final score and level of CyberFirst recognition

7 The school or college is then made aware if they have been successful and will be provided with **next steps** from IN4 Group and the NCSC

CyberFirst North West Achievements 2022-23

177
Schools and colleges engaged

698
Students attended CyberFirst Days

131
Expressions of interest received

35
Schools and colleges attended IN4's events in Salford

15
Recognition applications

13
Recognition awards

"Being accredited as a Bronze Cyber First School & College has allowed us to demonstrate our passion and drive to improve cyber education at Moor Park. Having this accreditation and through industry engagement in the future, we hope that more students become cyber-savvy and value the skills they are learning in computing lessons."

Moor Park High School & Sixth Form

"Being recognised as a CyberFirst school has meant that we are now partnered with a fantastic industry expert which has opened up many opportunities for our school. We are thrilled to be supported so well in developing our cyber strategy and our careers programme for future years."

Tauheedul Islam Girls' High School

"Recognition for Kingsway Park High School is a great step forward for us and reinforces our motto of 'We co-operate - We Pioneer - We Belong.' We feel this recognition is part of our pioneering spirit. It allows us to give our students opportunities we would not be able to offer otherwise."

Kingsway Park High School

"Gaining cyber college status will not only allow us to highlight our current work in this area to parents and future students but also create new links with industry partners to offer further experiences for our learners. Our students join us by wanting to work in cyber security but will hopefully leave with an understanding of what is required, a skillset to begin that journey and knowledge of the next steps."

Winstanley College

STAGE 4

CyberFirst Opportunities for Schools & Colleges

Primary school	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
CyberSprinters		Access to a variety of resources and lesson plans					
				Careers talks from Industry Partners			
		Enrichment Day activities					
					Mentoring opportunities		
		Empower Events	Workplace Visits	Work experience opportunities with Industry Partners		Work experience opportunities with Industry Partners	Workplace Visits
		Girls Competition Adventurers	Trailblazers	Defenders	Futures	Advanced Summer Camp	Bursary Applications

There are a variety of opportunities available through CyberFirst Schools & Colleges, including:

Careers Talks from Industry Partners

For recognised schools

Opportunities for an industry partner to visit schools or colleges and complete career talks with students, helping them gain vital information on pathways and success

Empower Events

Our premier event invites hundreds of students from across the North West to acccess technology and activities aimed at empowering young women to consider a future career in the sector. DJs and prizes galore included!

Girls Competition

Specially designed for Year 8 Girls – Teams are made up of four female students who will battle cyber tasks head-to-head with other schools in the region. One school will be crowned the winner of the North West!

Trailblazers

A day event for Year 8s involves fun and educational activities for them to start considering how computer science can play a role in their future careers

Adventurers

A day event for Year 9s, focused on completing fun and educational activities while also inspiring them to consider cyber and tech roles

Enrichment Day activities

For recognised schools

Immersive and engaging days, allowing students to experience extra activities and workshops focused on cyber and technology

Mentoring

For recognised schools

An opportunity for cyber enthusiasts to gain 1-1 advice and guidance from our industry partners to discuss the future – offering a more personalised journey

Defenders

For recognised schools

Early access to apply for the Year 10 course aimed at introducing the building and protecting of small networks and personal devices

Resources and lesson plans

Access to a multitude of NCSC approved activities and resources

Futures

For recognised schools

Early access to apply for the Year 11 course which looks at cyber security threats and ways to protect against them

Advanced Summer Camp

A 5-day residential camp for Year 12s, looking at the skills and behaviours they need to enter cyber security

Bursary Applications

Undergraduates can apply for £4,000 per year of financial assistance and paid cyber security training to help start their career in cyber

Workplace Visits

For recognised schools

Ever wondered what a cyber or tech workplace looks like and what type of jobs you might do? Workplace visits allow students to have a personalised tour, and talks from staff who have progressed including the type of activities they complete on a daily basis

Work Experience

For recognised schools

Gaining vital hands-on experience within the cyber sector – Whether helping out at our CyberFirst days or working with one of our industry partners

CONTACT US

IN4 Group
Blue Tower
MediaCity
Salford M50 2ST

0161 686 5770
cyberfirst@in4group.co.uk
in4group.co.uk/cyberfirst

𝕏 @IN4_Group
in IN4 Group

National Cyber Security Centre

IN4.0™ Group

Cyber First

National Cyber Security Centre

IN4.0™ Group