

INSTITUTES OF TECHNOLOGY

Rosa Wells

Vice Chair National
Network of Institutes of
Technology

02.02.24

INSTITUTES OF TECHNOLOGY

Institutes of Technology (IoTs) are the Government's flagship programme designed to spearhead the delivery and growth of higher technical education (Levels 4 & 5) in STEM subjects.

Backed by £290 million of government investment, each **Institute of Technology (IoT)** is a regional partnership between further education colleges, universities and leading employers, ensuring that students get the skills that will secure them good jobs, as well as progression pathways to degree level.

Every IoT has its own specialisms incl:



Advanced Manufacturing;



Agritech;



Cyber security;



Healthcare.



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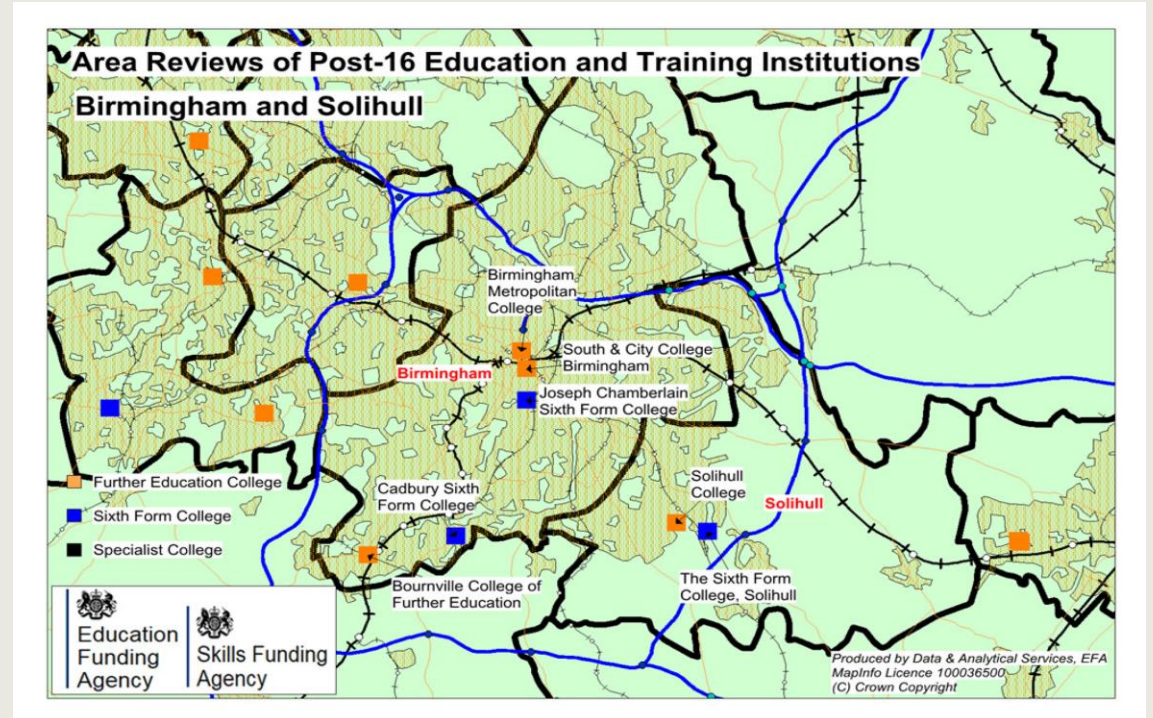


Institutes of Technology: supporting partnership and collaboration

Where did it start?

2016 Area Review:

“The colleges are keen to respond to the local skills gaps by considering the establishment of an Institute of Technology, focusing on higher level technical skills, and will develop plans for this, working with government to align their proposals with emerging policy and funding plans.”





SUPPORTING PRODUCTIVITY

Backed by £290 million government investment in our state-of-the-art technology, each Institute of Technology (IoT) focuses on one or more specialisms including – medical engineering, high-value manufacturing, cloud networking and healthcare. We aim to fill immediate skills gaps while also building a pipeline of talent for the future. With employers as core partners and members of our governing bodies, we are committed to identifying future skills needs and supporting technological innovation to drive economic growth, both locally and nationally.



INCREASING OPPORTUNITY

Our network delivers high-quality training and education across a range of courses (including T-levels and bachelor's degrees), but we specialise in Higher Technical Qualifications (HTQs), professional training and higher apprenticeships. We are dedicated to widening opportunities in higher education by offering flexible and affordable qualifications to adults of all ages. We are also committed to addressing the lack of diversity in some parts of the STEM workforce.



SERVING COMMUNITIES

Rooted within our regions, we work closely with local employers, business organisations, schools, and community groups to offer more career opportunities to those living and working locally. But collectively, we also operate as an outward-looking and highly collaborative national network to share ideas and expertise and work with employers nationally.

LOCATIONS OF THE INSTITUTES OF TECHNOLOGY

Following the Government's announcement in April 2019, the first wave of 12 Institutes of Technology (IoTs) are now in operation. These are made up of more than 40 further education colleges, around 60 leading employers and 18 universities. Visit institutesoftechnology.org.uk to discover the regional partners within each IoT.

A second wave of nine additional IoTs in areas not currently served by the existing network was announced in December 2021 and are in development while they complete the Department for Education's approval process.



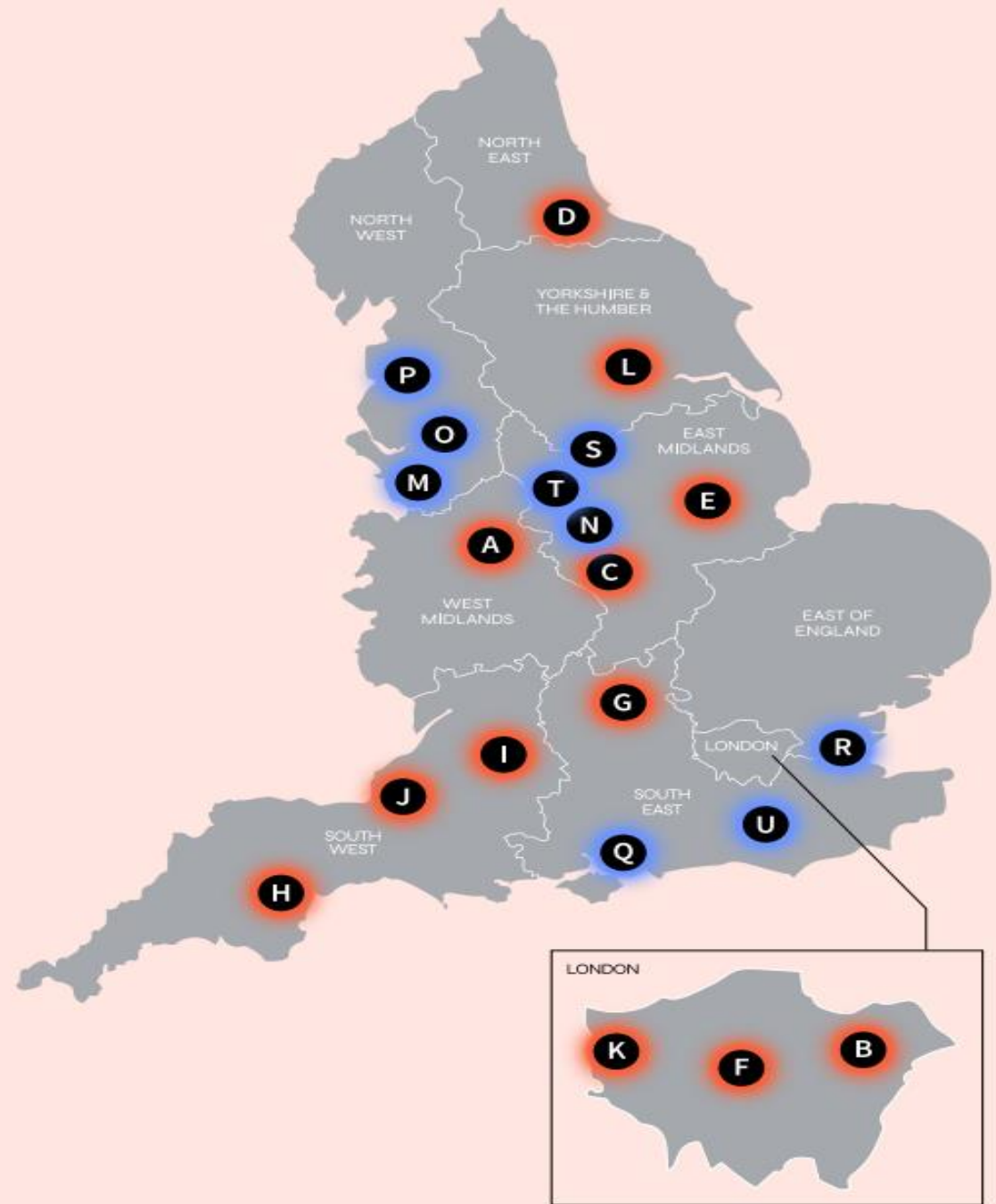
IOTS IN OPERATION

- A Black Country & Marches IoT
- B East London IoT
- C Greater Birmingham & Solihull IoT
- D North East IoT
- E Lincolnshire IoT
- F London City IoT
- G South Central IoT
- H South West IoT
- I Swindon & Wiltshire IoT
- J West of England IoT
- K West London IoT
- L Yorkshire & Humber IoT

IOTS IN DEVELOPMENT*

- M Cheshire & Warrington IoT
- N East Midlands IoT
- O Greater Manchester IoT
- P Lancashire & Cumbria IoT
- Q South Coast IoT
- R South East IoT
- S South Yorkshire IoT
- T Stoke-on-Trent & Staffordshire IoT
- U Sussex & Surrey IoT

*Official names to be confirmed.



The National Network of Institutes of Technology

Operating as a highly collaborative, national network to share ideas and expertise.

21 Institutes of Technology

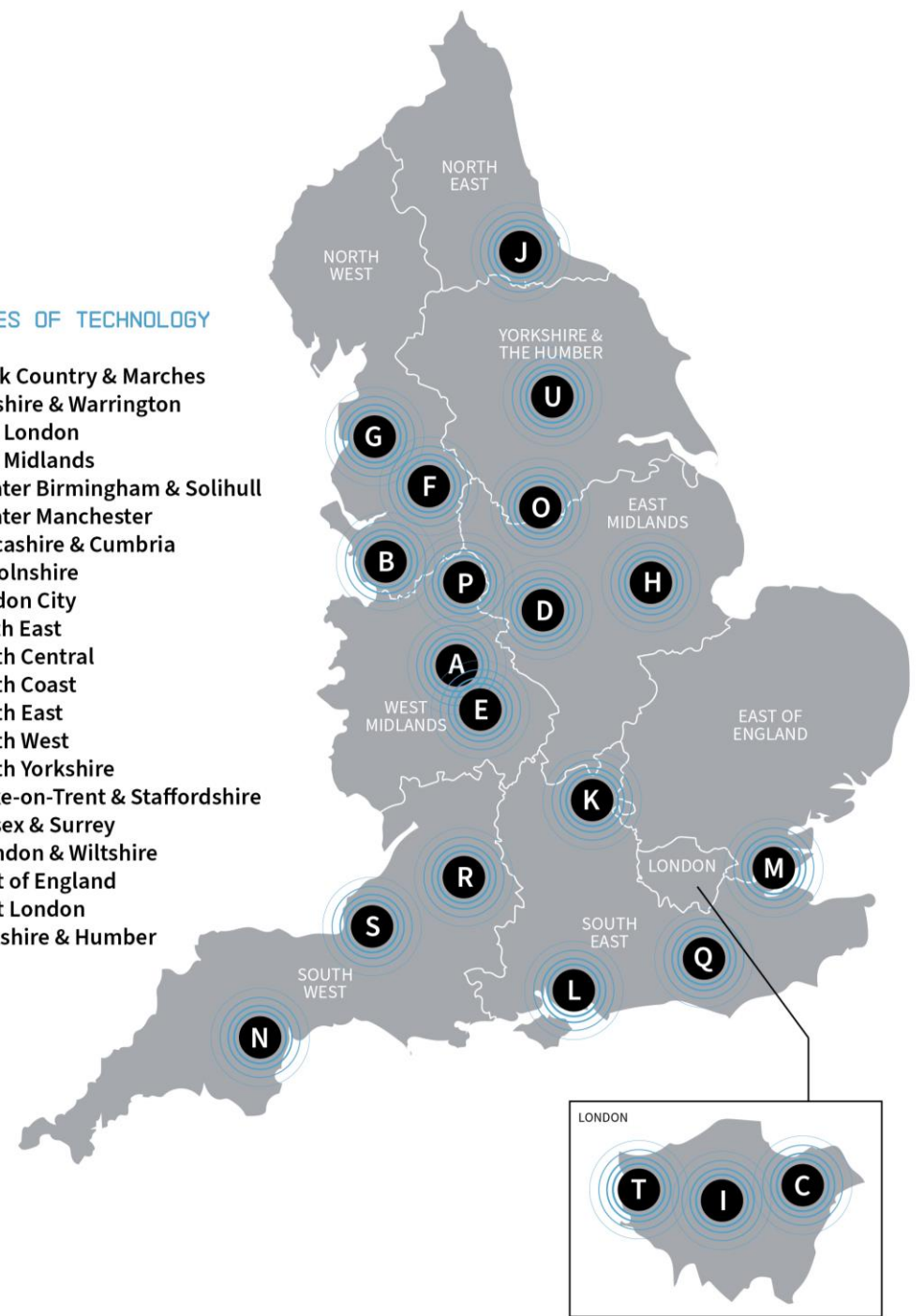
77 colleges

35 universities

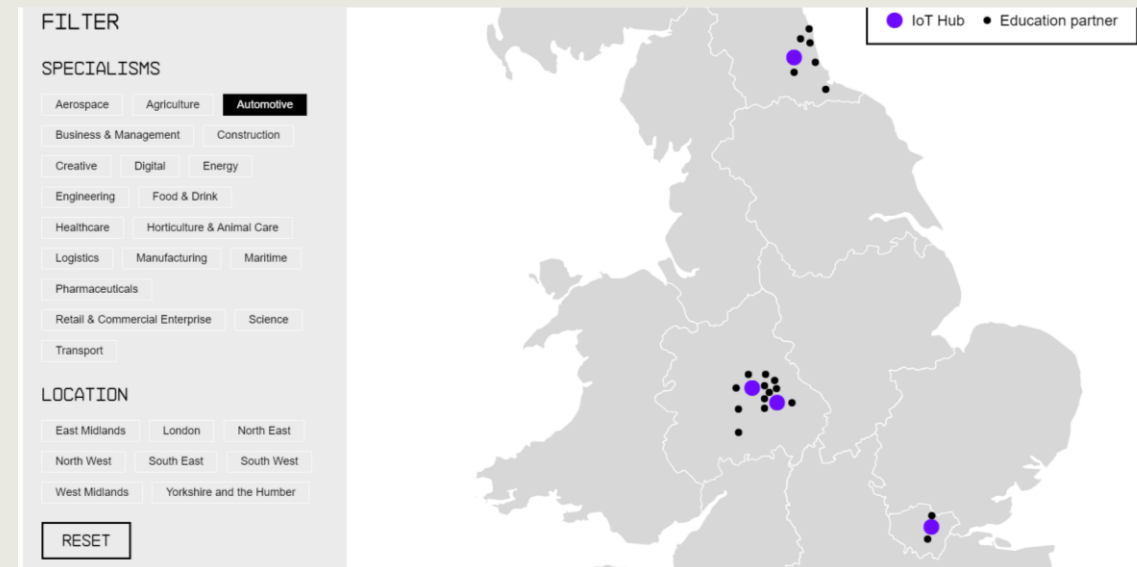
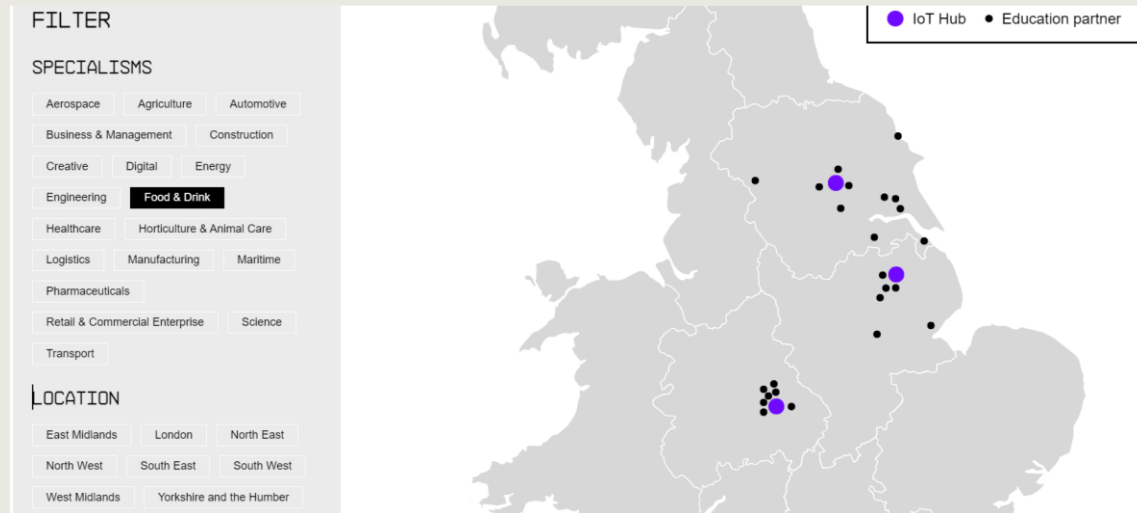
99 employers

INSTITUTES OF TECHNOLOGY

- A Black Country & Marches
- B Cheshire & Warrington
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- F Greater Manchester
- G Lancashire & Cumbria
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- M South East
- N South West
- O South Yorkshire
- P Stoke-on-Trent & Staffordshire
- Q Sussex & Surrey
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- S West of England
- T West London
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The National Network of Institutes of Technology



EMPLOYER PARTNERSHIPS

Institutes of Technology (IoTs) are distinctive to the education landscape because of their strong relationship with employers, particularly SMEs. Employers sit at the heart of IoTs as core partners, customers and members of their governing bodies.

Across the Network there are over 100 anchor employer partners feeding into IoT strategy and designing and delivering curriculum.



BUILDING THE PROFESSION

Institutes of Technology (IoTs) are home to students of all ages and backgrounds – young adults (aged 18-21), professionals looking to upskills and older adults changing career.

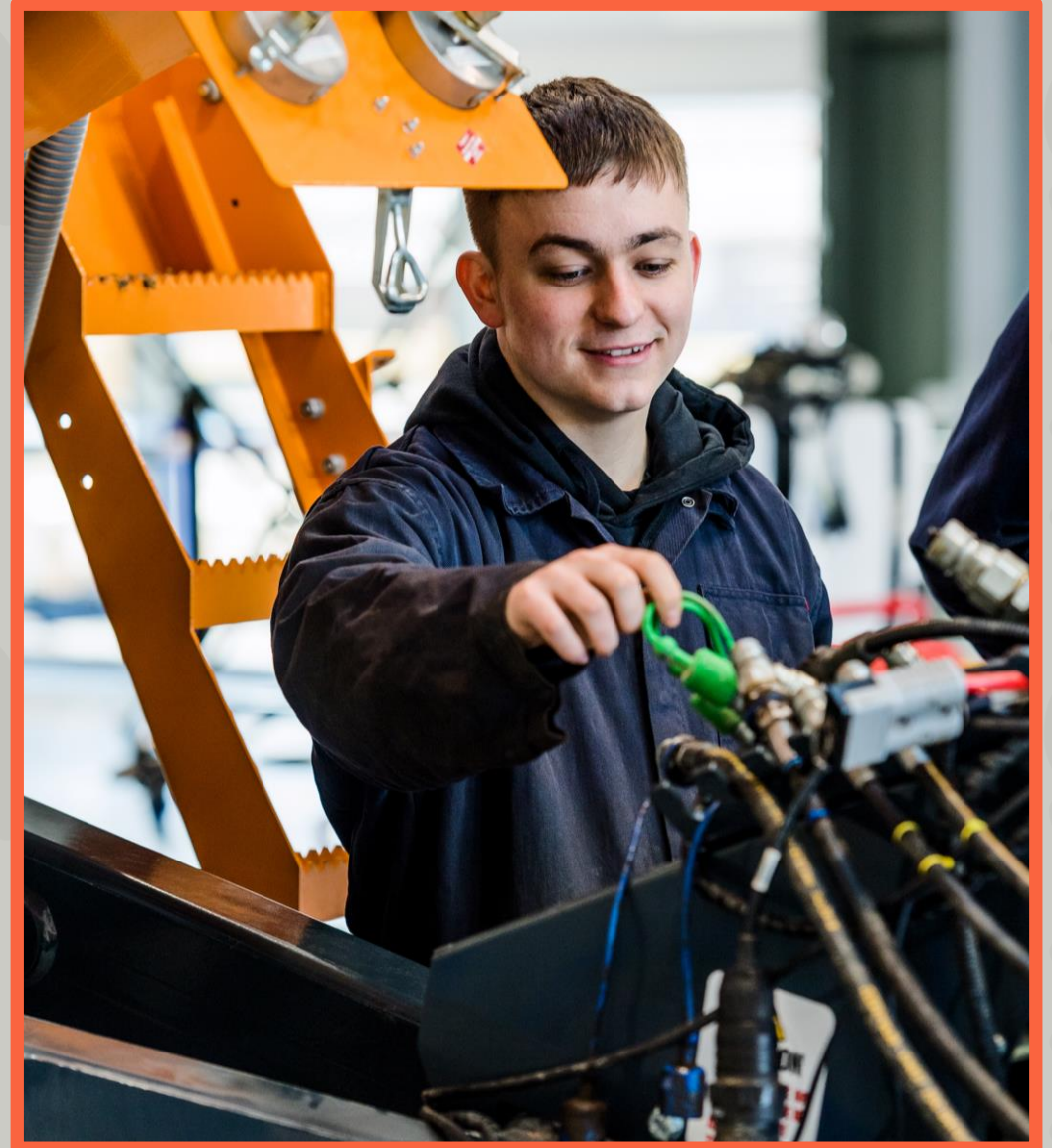
Rooted in their regions, IoTs help fill immediate skills gaps, while providing a diverse, skilled pipeline of employees who bring practical knowledge that is valuable to both national and local employers.

IoT staff are experts in their field and have broad industry experience. Ensuring quality delivery of free and low-cost short courses, apprenticeships and student-loan funded higher technical qualifications.

IoTs have a strong ambition to increase participation among underrepresented groups.

- Enabling young people from non-traditional backgrounds to access higher education locally.

- Increasing the representation of women in STEM.



INNOVATION

Each IoT is using the capital funding received from the Government to give learners and employers access to state-of-the-art equipment and facilities.

[The Skills to Succeed: Meeting the country's evolving technical skills needs](#) a report produced on behalf of the Institutes of Technology Network looking at a range of challenges that communities face today, including sustainable construction and energy, and how Institutes of Technology are helping to plug the skills gaps.



THE SKILLS TO SUCCEED

MEETING THE COUNTRY'S EVOLVING TECHNICAL SKILLS NEEDS

A report produced on behalf of the Institutes of Technology Network

Models of Constitution

These do vary across the network.

Most common is a Company Limited by Guarantee.

Colleges, Universities and Employers are usually Directors on the board.

Staff tend to work within a college or university. In some cases, they are seconded into the Company.



PARTNER CONTRIBUTIONS

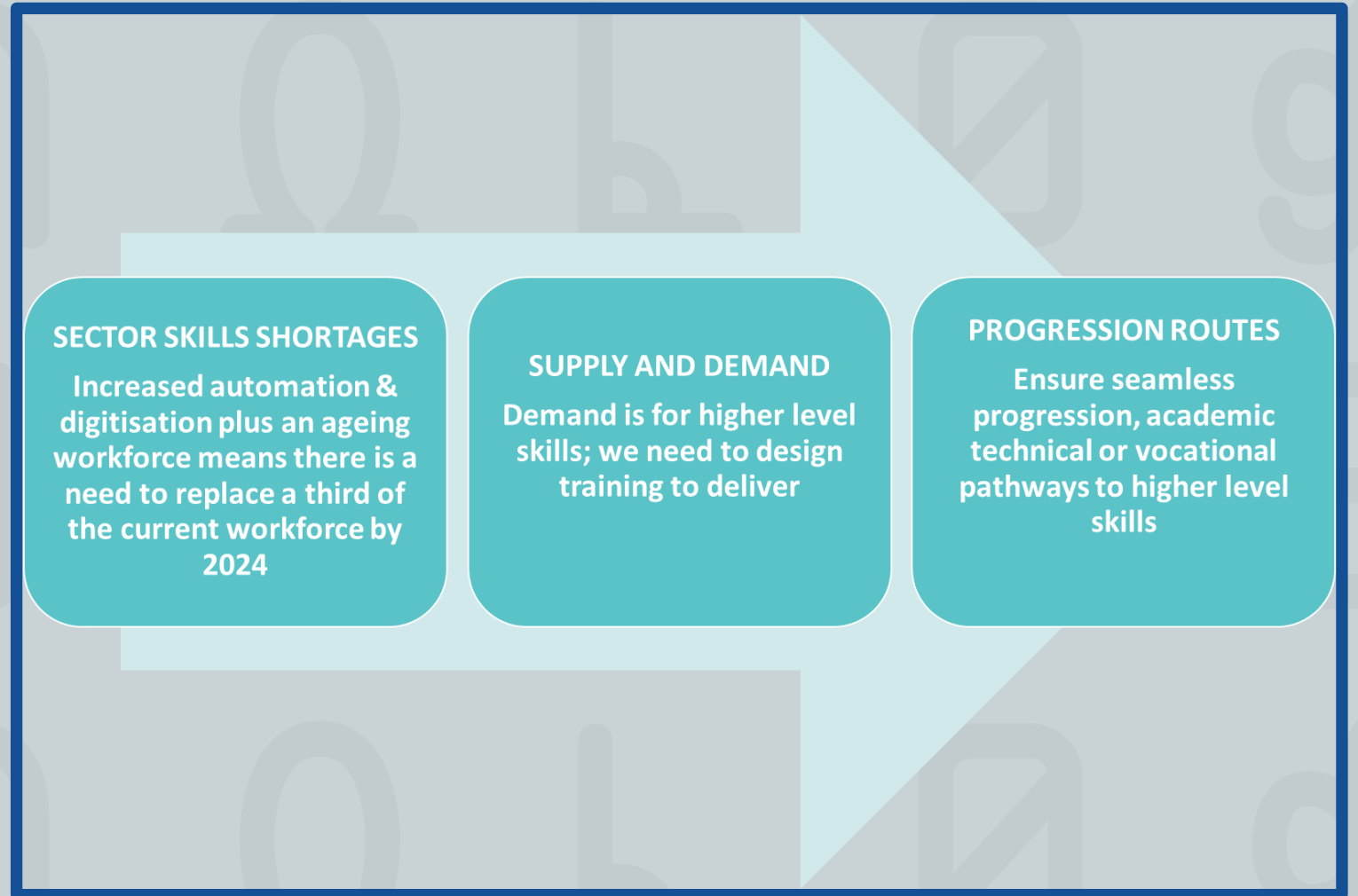
Finances
Resources
Staffing



PROGRESSION ROUTES

Designed to help
simplify
progression routes
between partners

Focus on improving
awareness of level
4/5 for students,
employers and
other stakeholders



STUDENT ENROLMENT AND REGISTRATIONS

Institutes of Technology do not have a UKPRN for delivery

They are not in direct receipt of ESFA, apprenticeship or student loan funding

They are not in scope to be inspected by Ofsted or required to meet OfS conditions



WHAT DOES AN IOT OFFER STUDENTS?

Regionally responsive Curriculum

Employer Led

Investment in industry standard equipment

Progression routes

Innovation

Joined up curriculum



Experts and minister hail 'flying start' as recruitment stats for IoTs revealed

'This could prove very attractive in many localities'



Billy Camden

21 Apr 2023, 7:00

[More from this author](#)



[See discussion](#)

★ Exclusive



The first batch of flagship Institutes of Technology have been hailed after recruitment data obtained by FE Week showed they are off to a "flying start".

Twelve IoTs backed with £170 million of capital cash have launched since 2019, racking up more than 17,000 starts between them – 95 per cent of their combined target.

Four of the establishments – collaborations between colleges, universities and employers that specialise in higher technical training – have exceeded their own targets: two hit 90 per cent or above, with the remainder not far behind.

All IoTs recruited hundreds of students in their first year, with two recruiting more than a thousand.

Experts have praised the "impressive" start as it was achieved during or in the aftermath of the Covid pandemic and against a backdrop of other new technical institution experiments – such as National Colleges, University Technical Colleges and Studio Schools – struggling in their infancy.

Skills minister Robert Halfon said: "As this research shows, IoTs are off to a flying start and have been in high demand, but we are not complacent. I am determined to create a high-skilled, diverse workforce which meets local and employer needs, putting Institutes of Technology at the heart of that ambition."

WEST OF ENGLAND INSTITUTE OF TECHNOLOGY

We support business growth by developing a skilled workforce that can drive productivity and take advantage of key growth opportunities provided by the digitalisation of the economy. By working together with industry, we can create programmes that allow individuals and businesses to seize the opportunities of technological change.

Open to learners: September 2019

SPECIALISMS

Aerospace

Engineering

Digital

Healthcare

Energy

Manufacturing

PROVIDERS

Bath College

Yeovil College

Gloucestershire College

Weston College

UWE Bristol

EMPLOYER PARTNERS

Leonardo

Airbus

National Composites Centre

Bamboo

NHS

GE Aviation

North Somerset Council

GKN

Renishaw

IO Academy

Rolls-Royce

Jisc

St Monica Trust

West of England IoT - GKN's Global Technology Centre

IoT Degree Apprenticeship Training Hub co-located with industry focused on sustainable aviation research and development

- Hydrogen Propulsion
- Advanced composites for electric aircraft
- Additive manufacturing
- Industry 4.0 processes



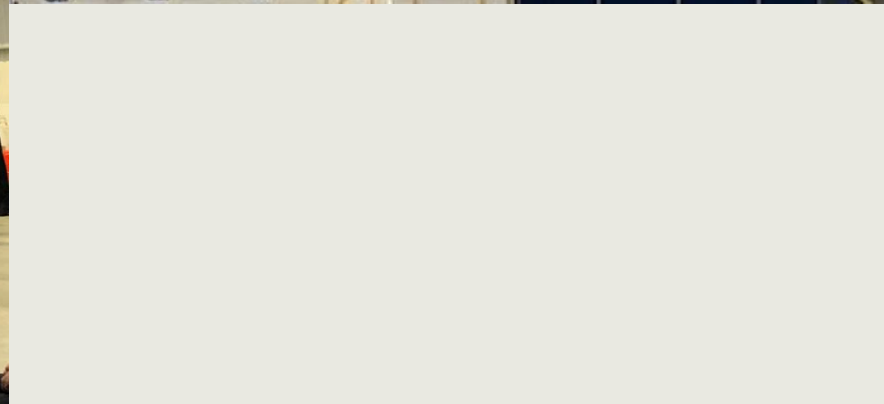
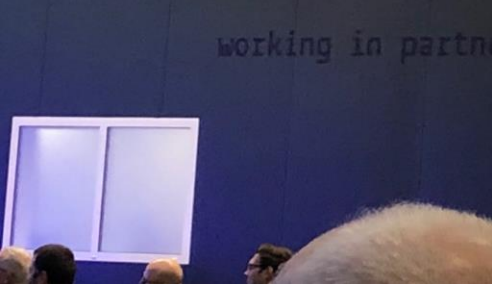


GKN Aerospace is an anchor employer partner of West of England Institute of Technology.

“GKN Aerospace has been a strong advocate of the West of England Institute of Technology (IoT) since its inception. It has enabled GKN Aerospace and other employers in the region to have a voice in the development of skills and technical education – from early careers through to the reskilling of our existing workforce and for others joining aerospace from complementary sectors.

“Our links with the IoT have enabled us to create tailored training solutions and, through our access to the Department for Education, allowed us to help shape the skills of the future. We are delighted to be a founding partner of West of England IoT.”

Paul Ashbee, Apprenticeships Manager,
GKN Aerospace



WEST OF ENGLAND

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T	E	C	H	N	O	L	O	G	Y

GREATER BIRMINGHAM & SOLIHULL INSTITUTE OF TECHNOLOGY

We retrain, upskill and inject new talent into industry with the latest skills and knowledge needed by employers. From traineeships to degree apprenticeships, recruitment to research, we have first-class, sector-leading facilities, equipment and programmes – all supported by expert staff – that are crucial to productivity growth in the region and beyond.

Open to learners: September 2019

SPECIALISMS

Aerospace

Food & Drink

Automotive

Manufacturing

Engineering

PROVIDERS

Solihull College & University Centre

Aston University

South & City College Birmingham

Birmingham City University

University of Birmingham

Birmingham Metropolitan College

University College Birmingham

EMPLOYER PARTNERS

Bosch

Salts Healthcare



HYDRAFORCE



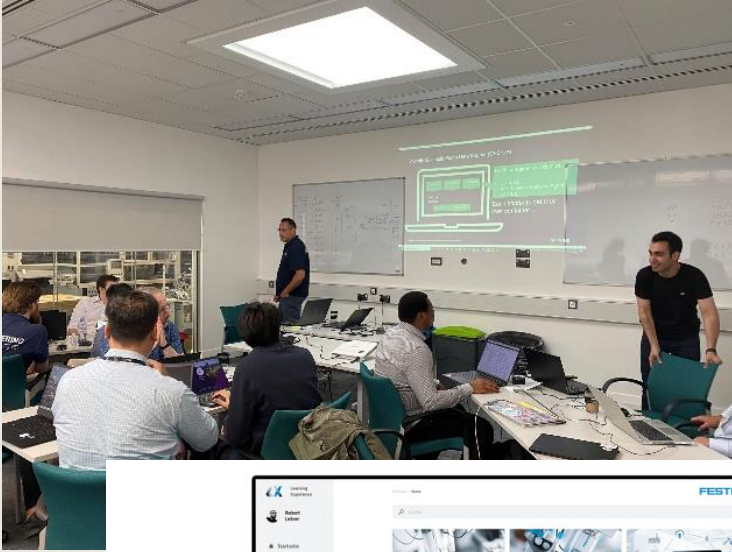
FANUC

Institutes of Technology, with their funding to invest in state-of-the-art equipment and facilities and employers in the driving seat, will give businesses the skilled workforce they need to drive growth and get more people into rewarding jobs.

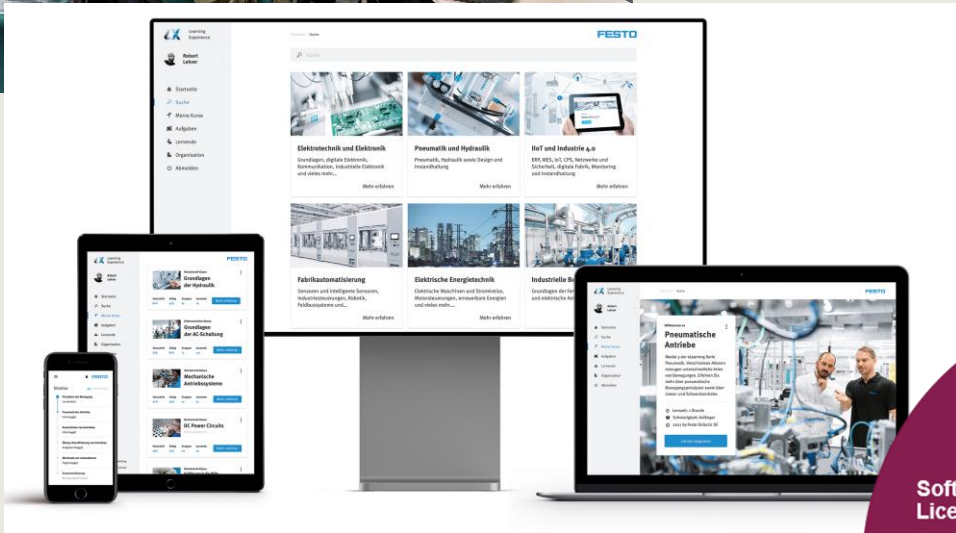
**GREATER
BIRMINGHAM
& SOLIHULL**
I O T







Collaboration for - Investment - Developing Teams



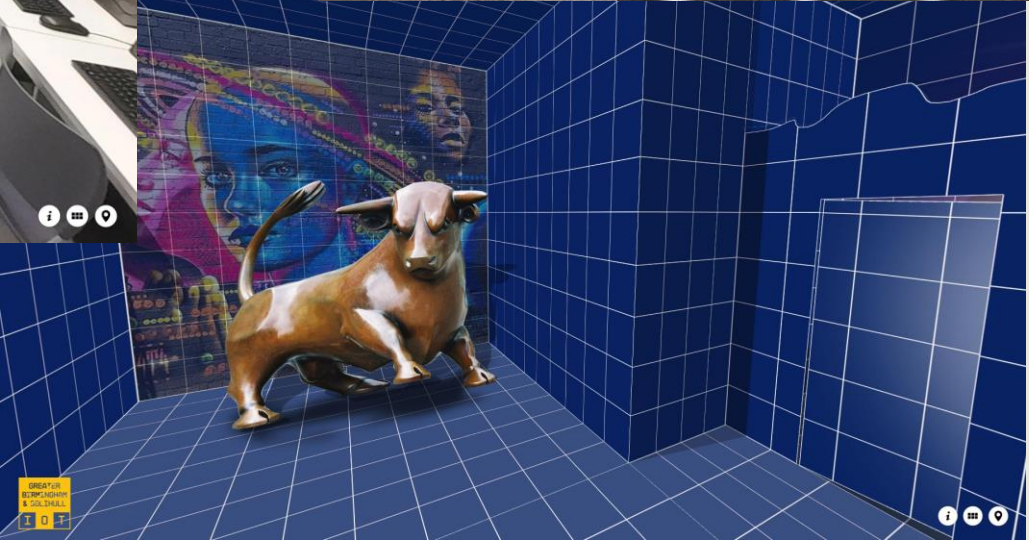
Envisage Group is a critical partner on the Greater Birmingham and Solihull Institute of Technology (IoT) Employer Advisory Board which ensures that the employer voice is central to the IoT and firmly embedded within its structure.

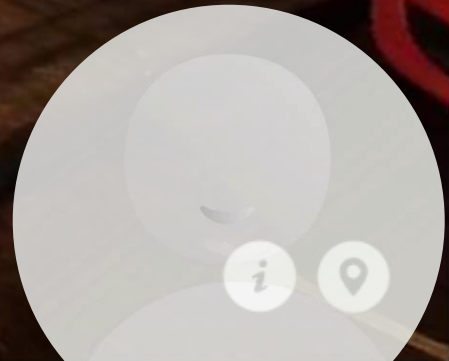
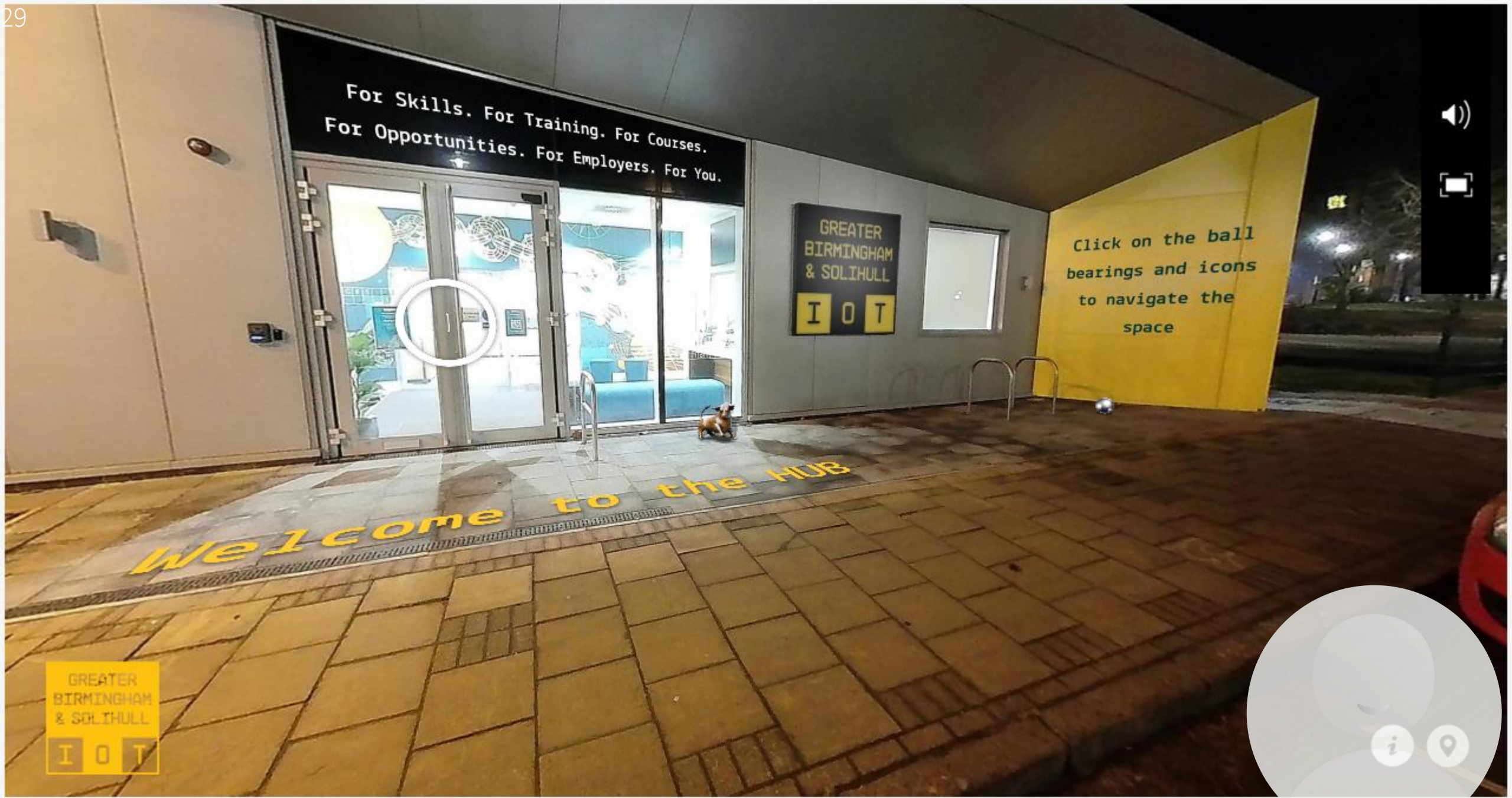
“Greater Birmingham and Solihull Institute of Technology plays a huge role in protecting skills in engineering and manufacturing for future generations, and acts as an integral catalyst for promoting engineering skills in the workplace and developing manufacturing within the Greater Birmingham area.

With such a significant shortage of skills and talent in all areas of engineering and manufacturing in the region, raising awareness of the opportunities available in these industries is the first step to individuals leading a rewarding career and produces a much-needed talent pool for businesses in the region.”

Sukhi Clark, Group Operations Director, Envisage Group

GBS IoT Digital Platform





STRENGTH

SEE A DIFFERENT FUTURE



OUR STEM EDUCATION RESOURCES

[LEARN MORE](#)



BLACK COUNTRY & MARCHES INSTITUTE OF TECHNOLOGY

Working in a region that traditionally falls behind the rest of the UK in terms of higher-level education, we provide industry-led training focused on local transformational sectors. We work with businesses to address the workforce challenges of today and, through our work with schools and the wider community, we strive to inspire the next generation of talent.

Open to learners: September 2021

SPECIALISMS

Automotive

Healthcare

Construction

Manufacturing

Digital

Transport

Engineering

PROVIDERS

Dudley College of Technology

University of Worcester

In-Comm Training Services

Avensys UK

University of Wolverhampton

EMPLOYER PARTNERS

Fulcro

Thomas Dudley

NHS



Orson Equipment used industry standard equipment and the expertise of staff and tutors at Black Country and Marches Institute of Technology to design and manufacture a component for use in a motorsport vehicle.

“We faced a particular issue with the design and manufacture of an updated component for use in motorsport, and Black Country and Marches Institute of Technology afforded us the opportunity to have a 3D model produced and ‘trial fit’ the component on the car in situ.

“The overall saving in time and cost of being able to provide a robust 3D model for the customer to fit was significant and allowed both our customers and Orson engineers to have confidence in the design and manufacture process. We continue to explore similar opportunities that will allow us to fulfil our business needs using the technology and talent available at Black Country and Marches Institute of Technology.”

Dave Wood, Director, Orson Equipment




EXCITING NEW PARTNERSHIP EXPANDS BLACK COUNTRY AND MARCHES INSTITUTE OF TECHNOLOGY IN THE MARCHES

THE BLACK COUNTRY AND MARCHES INSTITUTE OF TECHNOLOGY (IOT) TODAY ANNOUNCED AN EXCITING COLLABORATION WITH TWO NEW COLLEGE PROVIDERS IN THE MARCHES. JOINING FORCES WITH HEREFORDSHIRE, LUDLOW AND NORTH SHROPSHIRE COLLEGE AND TELFORD COLLEGE, THE PARTNERSHIP WILL SEE MUCH NEEDED HIGHER-LEVEL SKILLS IN ENGINEERING DELIVERED IN THE MARCHES AREA.







What next? Future of IoTs



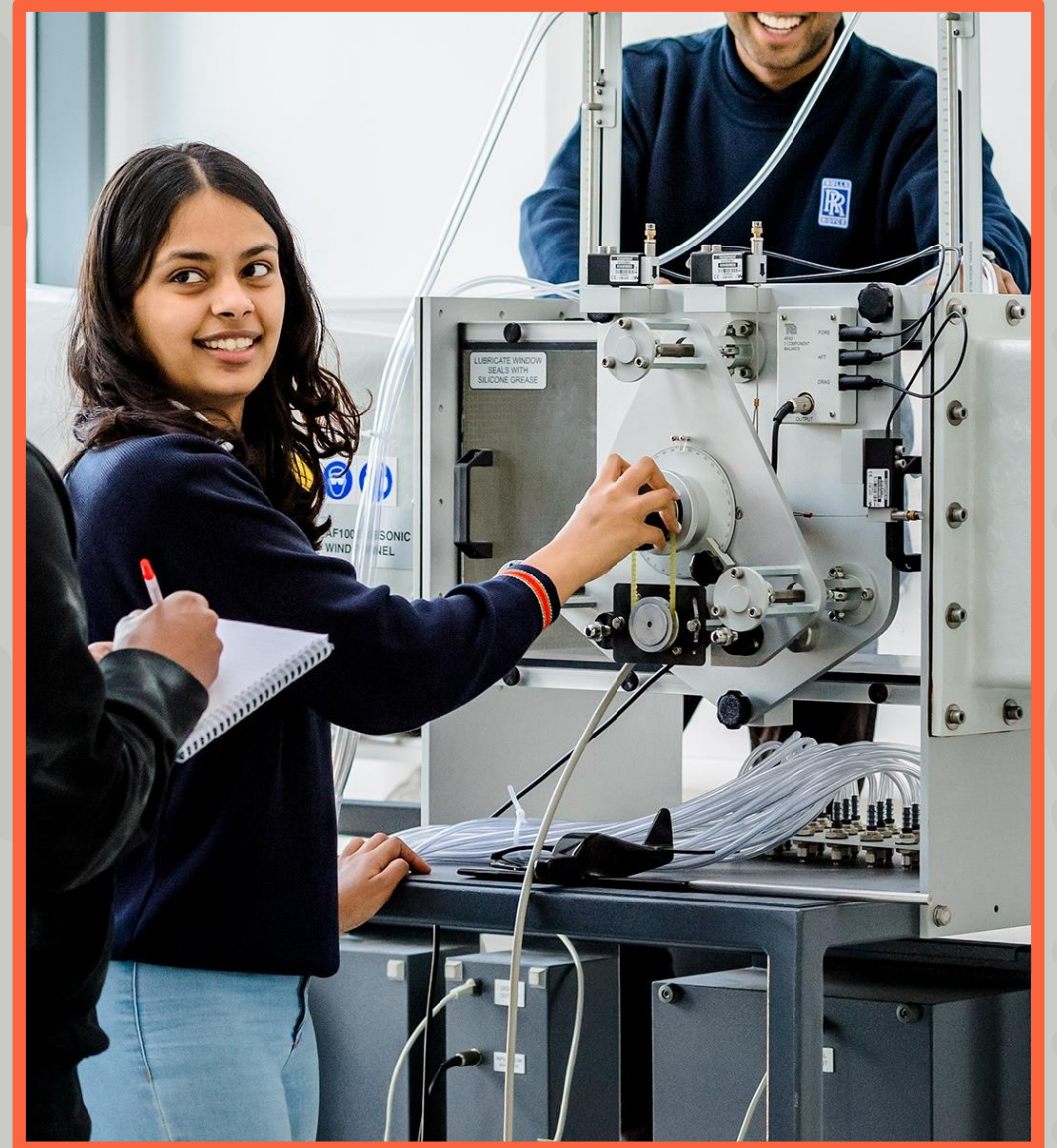
FURTHER INFORMATION

IoT National Website:

www.institutesoftechnology.org.uk

Contact address of IoT Network

enquires: iotnetwork@gatsby.org.uk



ANY QUESTIONS?

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