

STOKE-ON-TRENT & STAFFORDSHIRE INSTITUTE OF TECHNOLOGY

NEWSLETTER ISSUE NO.3 | APRIL 2022



NSCG

NEWCASTLE
AND STAFFORD
COLLEGES GROUP



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WELCOME

A VERY WARM WELCOME TO THE STOKE-ON-TRENT AND STAFFORDSHIRE INSTITUTE OF TECHNOLOGY NEWSLETTER.

As I am sure you are aware, this latest edition follows the announcement of the excellent news that the bid led by Newcastle and Stafford Colleges Group (NSCG) to bring a prestigious new £13M Institute of Technology to the region received formal approval from the Department for Education just before Christmas.

Clearly, lots of work went in to preparing the bid and I would like to extend my thanks to our employer partners, Keele University and our further education peers for their support. However, the real hard work has already begun as we are now working on the official 'pre-award' phase of the project. Over the last few months, we've made good progress working behind the scenes with the Department for Education to finesse the initial proposals and finalise all of the legalities needed to become an official Institute of Technology.

It has also been a busy period in terms of staffing announcements. I have recently announced my intention to retire at the end of this academic year, after a long and happy career spent entirely in the public sector, 20 years of which have been spent at Newcastle College, latterly NSCG. The College has been on an incredible journey during my tenure, and I am proud of the part I have played in making NSCG the 'Outstanding' college that it is today.

With a number of significant new projects already underway, it now feels like the right time for me to pass on the baton to someone who will lead the College through its next exciting chapter - the recruitment process to appoint my successor is underway and I hope to update you further on this in due course.

In the meantime, I am really pleased to announce that we have recently made the first appointment to the Institute of Technology leadership team. I'm sure you'll join me in welcoming Jason Lancaster to post of Director of Institute of Technology and Employer Partnerships. Local to the Staffordshire area, Jason has a wealth of experience in the sector and we are delighted to have him on board.

In tandem, we've been working on design work for the Institute of Technology Hub building, and securing our site location, details of which we hope to share very soon, and also confirming our governance arrangements - exciting times ahead!

We are really looking forward to working collaboratively with both the Department for Education and our key stakeholders, as we turn our shared vision into reality. Together, we are committed to delivering innovative, high quality technical and professional education that meets the needs of industry in our region, both now and in the future.



KAREN DOBSON OBE
PRINCIPAL & CHIEF EXECUTIVE

INTRODUCING

JASON LANCASTER, DIRECTOR OF INSTITUTE OF TECHNOLOGY & EMPLOYER PARTNERSHIPS

**WE ARE DELIGHTED TO
WELCOME JASON LANCASTER
TO THE NEWCASTLE & STAFFORD
COLLEGES GROUP SENIOR
MANAGEMENT TEAM, RECENTLY
APPOINTED TO THE ROLE OF
DIRECTOR OF INSTITUTE OF
TECHNOLOGY & EMPLOYER
PARTNERSHIPS.**

An experienced strategic leader, Jason will be responsible for working with local employers and education providers to turn the current Institute of Technology vision into reality. His dual role also sees him oversee all aspects of employer partnerships for NSCG, including its apprenticeship and work-based learning provision.

Jason brings a wealth of expertise to the role, having initially studied electronic engineering at Newcastle-under-Lyme College and Staffordshire University, and undertaking research in this field. He joined Newcastle-under-Lyme College as a Lecturer in Engineering in 1998, and was later promoted to a Head of Faculty role at the College.

After 10 years at the College, Jason left to work as an independent consultant in the sector. During this time, he supported a number of colleges and training providers on transformation exercises, leading on the introduction of new FE and HE provision and delivering a variety of strategic projects.

Jason has also undertaken senior leadership roles in both FE colleges and independent learning providers, including 2.5 years as Vice Principal for Performance Improvement at Northampton College and more recently, a period as Deputy Principal at Stoke-on-Trent College.

Speaking of his aspirations for the Institute of Technology, Jason said: "I feel very privileged to be leading the development of the Stoke-on-Trent and Staffordshire Institute of Technology. Our Institute will serve a breadth of technology industries across our region, including advanced engineering & manufacturing, construction design & management, digital & computing and health technologies. By enabling a new generation of students to access cutting edge technical training through a raft of new Higher Technical Qualifications (HTQs), we hope to transform the employment opportunities of our communities, the life-chances of our people and contribute to thriving economic performance across Stoke-on-Trent and Staffordshire."

Continued Jason: "By working with our local employers, including both large and smaller companies, we will carefully tailor our programmes to ensure they deliver both the cutting-edge technical skills our industries need along with the broader business and employability skills that help make the difference. Our programmes will focus on equipping learners with higher-level future-facing skills and knowledge, enabling them to maximise the impact of the rapid innovations taking place across our technology industries including automation, artificial intelligence and virtual/augmented realities."

"I'm looking forward to working with local companies large and small, other employer groups and education institutions to develop our programmes. Please do not hesitate to get in touch if you want to be part of this exciting initiative".

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BETTER TOGETHER:

OUR HIGHER LEVEL SKILLS AGENDA

CAPITALISING ON RESPECTIVE PARTNERS' AREAS OF ACADEMIC AND INDUSTRY EXPERTISE AND THROUGH CLOSE PARTNERSHIP WORKING BETWEEN INDUSTRY AND EDUCATORS, THE STOKE-ON-TRENT AND STAFFORDSHIRE INSTITUTE OF TECHNOLOGY WILL PROVIDE TRAINING SOLUTIONS THAT EQUIP OUR LOCAL TECHNOLOGY SECTOR WITH THE HIGHER LEVEL SKILLS IT NEEDS TO THRIVE NOW AND IN THE FUTURE.

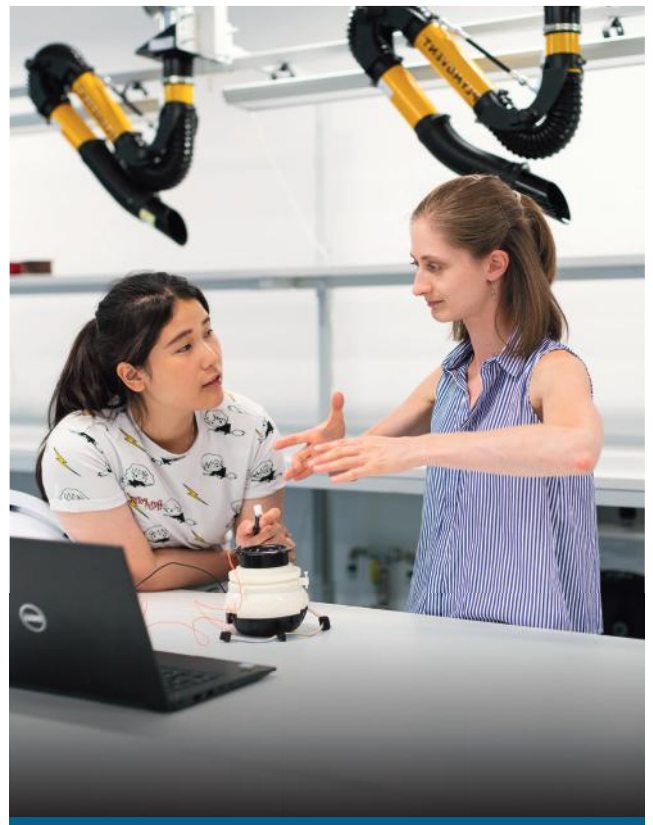
The communities that the Institute of Technology will serve are diverse and widespread, therefore our strategy focuses on a dispersed 'hub and spoke' model. The county town of Stafford will be home to the purpose built Institute of Technology 'hub', which will be supported by a series of networked local 'spoke' facilities to ensure the training programmes are as accessible as possible to both learners and employer partners across Stoke-on-Trent and Staffordshire.

The precise location of the £13M purpose built Institute of Technology Hub will be located in close proximity to the NSCG Stafford campus in the heart of Stafford, with access to an excellent transport infrastructure and within easy commuting distance of key Institute of Technology partner companies, including Hitachi Energy, MOOG Aircraft Group and Siemens.

The XX square metre building will comfortably house to over 1000 students and will be equipped with state-of-the-art STEM training equipment and technology.

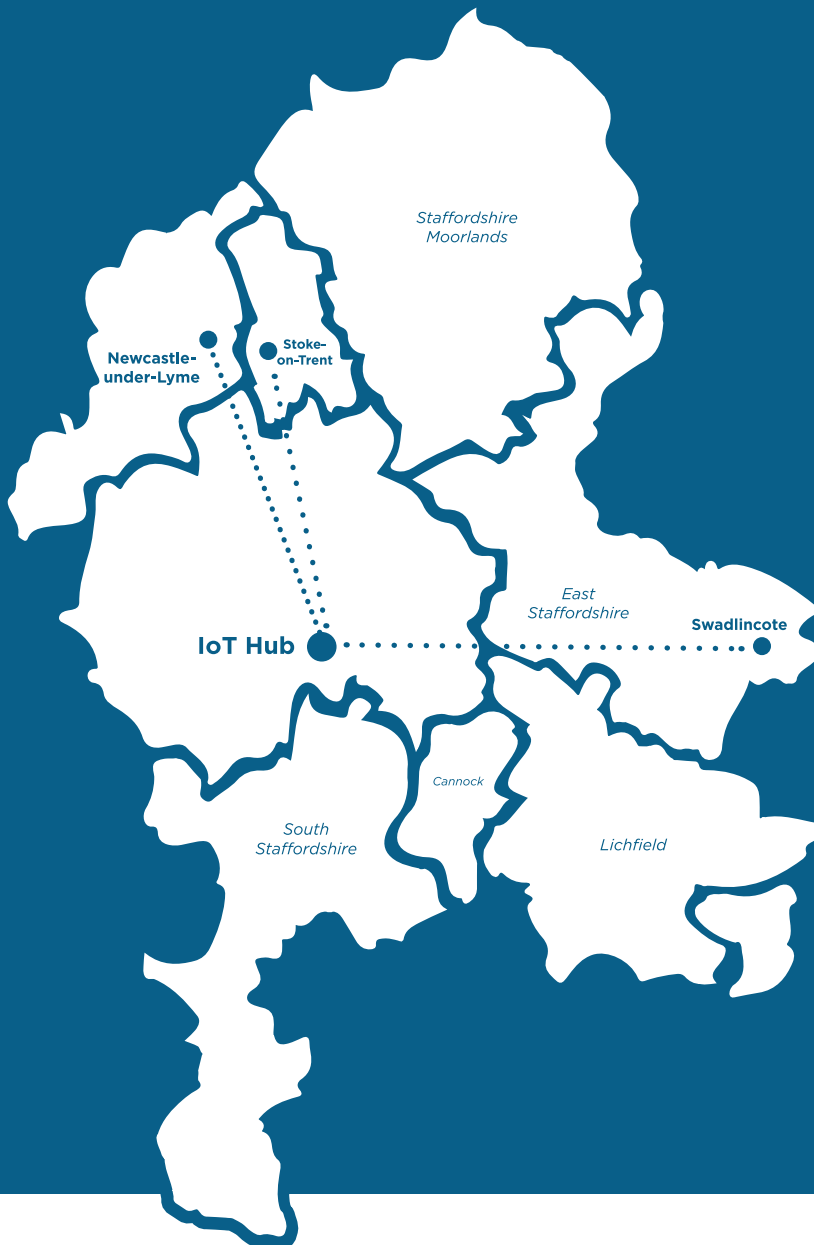
The Institute of Technology spoke training facilities will be located at NSCG Newcastle College, Burton and South Derbyshire College (Swadlincote) and Axia Solutions in Stoke-on-Trent, where there will be substantial investment in existing facilities including in leading edge equipment and technical disciplines and an improved curriculum offer.

This enhanced offer will provide new, high-level training opportunities with the ultimate goal of providing a pipeline of skilled workers, to support the local economy, both now and in the future.



AT THE HEART OF THE COMMUNITIES WE SERVE

Our partnerships with local education institutions, including further education colleges, independent training organisations and universities, enable us to develop across-regional training provision rooted in the needs of each part of Stoke-on-Trent and Staffordshire.



Existing facilities at the Stephen Burke Construction Academy, Burton and South Derbyshire College and Skills & Technology Centre at NSCG Newcastle College.

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INTRODUCING HITACHI ENERGY

ELECTRICITY HAS IMPROVED OUR STANDARDS OF LIVING SINCE ITS INVENTION MORE THAN TWO HUNDRED YEARS AGO. HOWEVER, THE TRANSFORMATIVE CHANGES THAT INCREASED ELECTRIFICATION WILL BRING OVER THE NEXT 30 YEARS, SUPPORTING SUSTAINABILITY, WILL GO BEYOND ANYTHING WE'VE SEEN BEFORE.

Recent studies of the total world energy system shows that global electricity consumption will more than double from 20% to over 40% of total energy demand by 2050. Certain regions of the world will go far beyond this level of electrification. In the UK the Government's Net Zero Strategy sets out how the UK will deliver on its commitment to reach net zero emissions by 2050 including a commitment to net zero electricity by 2035.

Three building blocks are stacking up to deliver this carbon-neutral electric future:

- *connecting larger volumes of renewables such as wind, solar and hydro;*
- *electrifying the world's transportation, building and industrial sectors; and*
- *where direct electrification is either not efficient or impossible, introducing complementary and sustainable energy carriers, such as green hydrogen*

Hitachi Energy is a global technology leader, championing the urgency of a clean energy transition through innovation and collaboration. Hitachi Energy in the UK, formerly ABB Power Grids, serves customers in the utility, industry, transport and infrastructure sectors with innovative solutions and services across the value chain.

Here in the UK, we have a strong regional presence in the Midlands, with our headquarters in Staffordshire and a close affiliation with

Newcastle and Stafford Colleges Group over a number of years, it is this strong affiliation that led us to become a lead strategic partner in the Institute of Technology bid.

We pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future, advancing the world's energy system to become more sustainable, flexible, and secure whilst balancing social, environmental, and economic value.

Our customers rely upon our highly skilled team in the UK and our advanced solutions to plan, build, operate, optimise, and maintain their power infrastructure, whilst increasing overall flexibility and resilience. Our solutions enable the safe, reliable, and efficient integration, transmission and distribution of bulk and distributed energy generated from conventional and renewable sources.

Our solutions enable the safe, reliable, and efficient integration, transmission and distribution of bulk and distributed energy generated from conventional and renewable sources.

To deliver maximum value, our operations are organised around four Business Units: Grid Automation, Grid Integration, High Voltage Products and Transformers.



HITACHI

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GRID AUTOMATION:

Our Grid Automation hardware, software and services portfolio unites deep domain knowledge and innovative technologies that enable customers across the globe to optimize the critical systems that power, move, and connect us. Our digitalization solutions are cost effective, agile, and innovative, delivering control, visibility, and stability for increasingly complex systems. Through digitalization we can improve reliability and resiliency and enable a wide range of sustainable choices.

GRID INTEGRATION:

Our Grid Integration portfolio spans a wide range of transmission and substation applications, which facilitate reliable and efficient system integration of the future digital electric network with minimum environmental impact. We incorporate the integrated systems, solutions and services of our business's DC and AC fields, including HVDC, Substations, FACTS, Offshore Wind Connections, Semiconductors and Power Consulting, for utility and industrial grid applications, and electrification of transportation solutions.

HIGH VOLTAGE PRODUCTS:

Hitachi Energy is a leader in high-voltage technology, offering a wide range of products up to 1,200 kV. We help to enhance the safety, reliability and efficiency of power networks while minimizing environmental impact.

Our technology leadership continues to facilitate innovations in areas such as ultra-high-voltage power transmission, enabling smart grids and enhancing eco-efficiency.

TRANSFORMERS:

Through our innovative and diverse Transformers team and pioneering technology we transform energy to add social, environmental, and economic value – powering future generations.

SERVICE & CONSULTING:

We offer an array of services – from traditional to advanced – for our products and systems that are offered a-la-carte or within an agreement.

Our services support our customers in planning; building; operating and maintaining their grids. In addition, Hitachi Energy is working towards being carbon-neutral in its own operations by 2030, in line with its purpose, 'Advancing a sustainable energy future for all.' The first-step target, set out in the company's Sustainability 2030 plan, has been achieved – the use of 100% fossil-free electricity in its own operations.

Through this achievement, Hitachi Energy has reduced its CO2 equivalent emissions by over 50% compared to 2019. This will amount to approximately 175 kilo tonnes of CO2e per year, equivalent to removing over 35,000 passenger cars from the road.

A portrait of RT Hon Michelle Donelan MP, Minister for Higher and Further Education. She is a woman with long brown hair, smiling, wearing a dark blue textured jacket with a gold zipper over a dark blue dress. The background is a plain grey.

A WORD FROM THE MINISTER

INSTITUTES OF TECHNOLOGY REPRESENT THE HEIGHT OF TECHNICAL TRAINING.

By uniquely bringing together further education colleges, universities and businesses, they ensure people can get the skills they need to progress into higher-skill, higher-wage jobs, and that employers get the talented workforce they need to thrive.

These innovative collaborations will play a vital role in closing the skills gaps in important sectors like construction, digital and advanced manufacturing enabling us to react to the current and future skills needs. Institutes of Technology are also key to our priority of levelling up opportunities for everyone.

The nine new Institutes of Technology currently under development will be a welcome addition to the existing network and I know they will all play a critical role in delivering the skills needed for our future success.

**RT HON MICHELLE DONELAN MP,
MINISTER FOR HIGHER AND FURTHER
EDUCATION.**

institutesoftechnology.org.uk

THE JOURNEY TO BECOMING AN INSTITUTE OF TECHNOLOGY





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HOW CAN I GET INVOLVED?

WE BELIEVE THAT STRONG EMPLOYER
ENGAGEMENT WILL BE CRUCIAL TO THE
SUCCESS OF THE STOKE-ON-TRENT AND
STAFFORDSHIRE IOT.

IF YOU OR YOUR BUSINESS ARE
INTERESTED IN BEING INVOLVED
AT ANY LEVEL, BE THAT WITH
WORK PLACEMENTS, CURRICULUM
DEVELOPMENT OR EVEN COMING ALONG
TO SPEAK TO STAFF AND LEARNERS,
WE'D LOVE TO HEAR FROM YOU.

GET IN TOUCH TODAY.
IOT@NSCG.AC.UK

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