Northumbria University NEWCASTLE

Initial artist's impressions show the North East Space Skills and Technology Centre on Northumbria University's Newcastle city campus.

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Northumbria University announces £50m space skills, research and development centre set to transform the UK space industry

Investments from Lockheed Martin, the UK Space Agency and Northumbria University forge pathway for NESST's global prominence

Northumbria University, Newcastle has secured a total of £50 million in

funding to create a world-leading space skills, research and technology centre in the North East of England.

Major funding awards that were confirmed today from the UK Space Agency and global aerospace giant, Lockheed Martin have been match-funded by the University itself to create the North East Space Skills and Technology Centre.

The centre, which will be known as NESST, will be a “game-changer” for the UK space economy. NESST is expected to directly support the creation of over 350 jobs and inject over £260 million into the North East economy over the next 30 years, playing a critical role in the government’s levelling-up agenda and immediately becoming a catalyst for the wider development of the UK space sector in the North East region.

Announced today during the UK Space Conference, the UK Space Agency has awarded £10 million to Northumbria University to support the development of NESST. In addition to this, Lockheed Martin committed a further £15 million investment in NESST to work with Northumbria’s experts on collaborative research, technology development, in-demand skills provision and STEM engagement activities over a 10-year period.

Through this strategic agreement, Lockheed Martin will become the first anchor tenant in NESST, creating unprecedented links for UK companies to access the global space market.

In recognition of the University’s excellence in all aspects of space research, and the transformative impact of NESST on the North East region and beyond, Northumbria University confirmed it would match-fund the UK Space Agency and Lockheed Martin awards with a further £25 million, bringing the overall total investment in NESST to £50 million.

Located in the heart of Northumbria University’s Newcastle city campus, NESST will be a new national space asset that brings together industry and academia to collaborate on internationally significant space research and technological developments.

NESST will put the UK at the forefront of research and innovation in areas including optical satellite communications, space weather and space-based energy, and will lead the way in providing specialist education and training to

ensure the UK space sector has the highly skilled workers it needs in the future.

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Lockheed Martin and Northumbria University first joined forces in 2022 to support the development of skills, research and technology in the space sector. Lockheed Martin has previously invested £630,000 into collaborations with the University on a number of trailblazing projects, including working together to create machine learning algorithms to detect and record nanojets, as well as joining forces to accelerate the use of space-based solar power. Its award of £15 million will be split evenly across capital equipment to be used in the centre and research and development work.

The UK Space Agency award to Northumbria was the largest of all the projects funded and the maximum amount that could be granted under the organisation's new Space Clusters Infrastructure Fund (SCIF) - an initiative aimed at increasing the capability, capacity, and connectivity of the UK's space research and development infrastructure - and is a clear sign of the UK Space Agency's confidence in the University's ambitions.

The University's Wynne Jones building, which overlooks Newcastle's central motorway, will be transformed into a prominent, iconic home for NESST. The building, which is expected to open in 2026, will feature world-class laboratory, testing, teaching, collaboration and office spaces, and the surrounding public spaces will be extensively regenerated to create an attractive new environment.

A major stimulus to the thriving local space cluster ecosystem, NESST will be home to some of the University's key existing partnerships with local, national and international organisations and will also be open to businesses of all sizes working in the space sector.

Northumbria University is one of the UK's leading universities in solar and space physics, receiving a number of significant funding awards in recent months including £5 million from the UK Space Agency to take forward work to build a new laser-based satellite communications system and awards totalling £2.6 million from the Science and Technology Facilities Council to fund studies into the Sun's activity and its impact on Earth and to create a new Centre for Doctoral Training in the field of data intensive science.

The flagship NESST development marks a further step-change for Northumbria's reputation as one of the UK's leading universities for research and teaching, following its success in the latest Research Excellence Framework and being named Times Higher Education's University of the Year 2022.

Professor Andy Long, Vice-Chancellor and Chief Executive of Northumbria University, said: "This is a pivotal moment, not just for Northumbria University, but for the wider North East region and indeed, for the UK space sector as a whole.

"This catalytic funding from both the UK Space Agency and Lockheed Martin recognises the world-leading excellence in all aspects of space research at Northumbria University. Quite simply, NESST will be a game-changer for the whole of the North East, ensuring the region becomes a major hub for innovation in the global space economy."

Nik Smith, Regional Director for UK and Europe, Lockheed Martin, said: "NESST is one part of Lockheed Martin's investment plans for our space business in the UK and will provide early prototyping and test facilities for new capabilities that could eventually be manufactured onshore. It will also be a reskilling hub, providing the pipeline of talent we will need to deliver national and even global programmes. With this investment, Lockheed Martin is thrilled to further our collaboration with Northumbria University and the UK Space Agency, and be a part of such significant initiatives for the region and the entire UK space sector."

Andrew Griffith MP, Minister of State at the Department for Science, Innovation and Technology, said: “Making Britain a space superpower means backing brilliant ideas up and down the land and harnessing the full potential of talent in our growing sector – from Dundee to Newcastle, Cornwall to Snowdonia.

“By investing with the private sector in research and facilities across the UK, we are ensuring they become home to global industries that support the growth of our £17.5 billion space sector, create hundreds of new jobs and build dynamic businesses across the UK.”

Dr Paul Bate, Chief Executive of the UK Space Agency, said: “Our space sector has been concentrated in London and the South East, but in recent years we’ve seen the emergence of vibrant clusters across the whole of the country and significant investments from world-leading companies such as Lockheed Martin. This is a fantastic opportunity for Northumbria University to further propel the UK to the forefront of world-class research and innovation with the North East Space Skills and Technology Centre (NESST), helping us lead the way in optical satellite communications, space weather and energy research, education and training.

“It’s a brilliant example of the potential of our thriving space sector across the length and breadth of the UK to develop innovative infrastructure that helps us deliver increasingly ambitious missions and capabilities. The Space Clusters Infrastructure Fund highlights the government’s commitment to space and will help deliver the goal set out in the National Space Strategy to build one of the most innovative and attractive space economies in the world, developing new skills and creating jobs.”

Cllr Nick Kemp, Leader of Newcastle City Council, said: “The North East Space Skills and Technology Centre is an incredibly exciting development for our city and the wider region.

“This is an opportunity to make Newcastle a major player in the UK space industry while providing a significant boost to the local economy and providing hundreds of new opportunities for people.

“We are very fortunate in Newcastle to have the world-leading academic institutions that we do, and securing the funding for this landmark project is an outstanding achievement for Northumbria University, and is testament to

the excellence of the research it undertakes."

Notes to editors

About Northumbria University – Times Higher Education's University of the Year 2022
Northumbria University is a research-intensive university that unlocks potential for all, changing lives regionally, nationally and internationally.

Northumbria has invested almost £300 million in its estate since 2005, including the development of outstanding new facilities such as Sport Central and Student Central, and new buildings for students on architecture and computing programmes. In 2021, the Office for Students awarded £2 million to Northumbria to expand and refurbish engineering and physics laboratories. In 2022, the Office for Students **awarded Northumbria £5.8 million to support the development of its new Centre for Health and Social Equity, which is expected to open in 2027 and will see the move of much of Northumbria's teaching activity from its Coach Lane Campus to the City Campus.**

About Lockheed Martin

Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 116,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

Please follow @LMNews and @LMUKNews on X for the latest announcements and news across the corporation.

About the North East Space Skills and Technology Centre (NESST)

NESST is an ambitious project that aims to enable the development of the R&D infrastructure needed to make space products mission-ready, accelerating their entry into commercial markets, whilst making a lasting and valuable contribution to the wider UK economy.

NESST will develop and harness Northumbria's research, education and knowledge exchange expertise to support the delivery of innovation in space

research and development as well as providing workers with the specialist skills needed to deliver the National Space Strategy, which sets out the government's ambitions for the UK in space.

NESST will enable Northumbria University to continue to undertake world-leading research in the areas of optical communications, space weather and space based energy. Early research programmes in NESST will focus on in-orbit and ground-to-orbit satellite laser communications systems; space based renewable energy and power beaming and the design, development and space readiness testing for small satellite constellations and novel payloads.

NESST will also:

- deliver widening participation programmes into regional schools to lift ambition and awareness of career opportunities in the sector alongside industry
- provide a research informed student experience linking to industry opportunities
- develop targeted PhD programmes in aligned areas to nurture the brightest talent
- deliver collaborative and contract research for the sector, particular focusing on the regional sector and opening up access to the Lockheed Martin Space supply chain opportunities
- develop CPD and re-skilling opportunities for the regional workforce

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UNIVERSITY OF THE YEAR 2022 (Times Higher Education Awards)

Northumbria is a research-intensive university that unlocks potential for all, changing lives regionally, nationally and internationally. Find out more about us at www.northumbria.ac.uk

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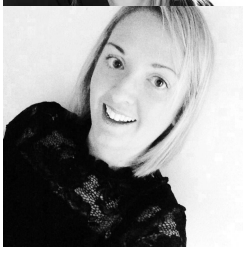

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