

# Lift-off for new generation of space scientists

- New apprenticeship opportunity is designed to help students get a job that's out of this world, with training including spacecraft manufacturing and satellite integration
- Growing space sector to aims create 30,000 new jobs in the industry over the next decade

Apprentices in England will soon be able to boldly study what no students have studied before in the UK, thanks to a new Government-backed space engineering apprenticeship, the Science Minister announced today (Monday 2 November).

Launching in January 2021, the Space Engineering Technician apprenticeship will help young people gain the technical skills needed for a career in space and follows a successful collaboration between the UK Space Agency, Airbus and the University of Leicester.

The UK space sector is hungry for engineers and technologists who understand the demands that come with working in space, and over the next decade the sector aims to create 30,000 jobs. This new opportunity will offer students, for the first time, the chance to focus on topics like spacecraft manufacturing; building skills in design, problem solving and testing.

Currently, apprentices training in space roles gain qualifications as general apprentices and craft apprentices. The Science Minister recently visited Airbus in Stevenage where she met apprentices working on satellite panel manufacturing, as well as those developing techniques to be used by the Rosalind Franklin the Mars sample fetch rover.

Science Minister Amanda Solloway said:

This new qualification is an incredible opportunity for young people which will equip them with the vital skills they need to help unlock the secrets of our solar system.

The UK's space industry is booming, and these new apprentices will become the next generation of engineers that will help us achieve our country's space ambitions.

The Space Engineering Technician apprenticeship is the first to be recognised by the Institute for Apprenticeships and Technical Education (IfATE) and approved by The Department of Education. The first cohort of students is expected to start their training from January 2021.

The success of establishing this level 4 apprenticeship has paved the way for the development of a degree equivalent (level 6) space engineering diploma

which is expected to be available to students from next September.

The University of Leicester has played an integral role in designing the new apprenticeship, utilising expertise in space teaching and research, which spans over 60 years.

Dr Nigel Bannister, Associate Professor in the University's School of Physics and Astronomy, said:

From large multinationals to small enterprises, companies in the UK are at the forefront of the commercial space revolution – it is therefore essential that the right training is offered for future recruits into the industry.

The international space sector is undergoing a major transformation as space becomes more accessible, and this new standard enables employers to recruit people with the skills needed to grow their business and ensure their workforce is trained in the latest technologies and techniques.

For apprentices, it represents a new route into a fantastically exciting sector – one which we are becoming ever more reliant upon in our daily lives. I hope it will also Airbus, which has been employing apprentices in space manufacturing for more than 30 years and has trained more than 120 apprentices over the last nine years using the general standards, can now use the more focused standard to ensure they are training more rigorously for their future workforce.

Richard Franklin, Managing Director of Airbus Defence and Space in the UK said:

Four years ago, we looked at how we could design and develop a space technician qualification that would enable students to gain specific engineering skills in space manufacturing.

Working in partnership with the UK Space Agency and the University of Leicester we have created the Space Engineering Technician apprenticeship. This is an exciting new route into space and helps the Government achieve its ambitions – whether that's the next mission to Mars or helping to build Earth observation satellites to monitor climate change.

Kathie Bowden, lead for Skills and Careers at the UK Space Agency, said:

The space employer Trailblazer group have worked together to set standards for the sector which will help build the workforce for this growing sector. These standards will help more companies take

advantage of the enthusiasm and energy that so many young people have to pursue a rewarding career in the sector.

BAE Systems PLC, Thales Alenia Space UK, Nammo Westcott Ltd, Reaction Engines Ltd, STFC RAL Space, United Kingdom Atomic Energy Authority and Oxford Space Systems have supported the process to allow over 900 space sector companies access to the qualification.

Jennifer Coupland, chief executive at the Institute for Apprenticeships and Technical Education said:

We're delighted to achieve lift-off with this new apprenticeship. It's incredibly exciting to think apprentices will be given opportunities to develop and manufacture equipment for the space industry. They could one day work on anything from satellites monitoring climate change to spacecraft sent on missions to distant planets.

Minister for Apprenticeships and Skills, Gillian Keegan said:

It's fantastic to see the UK Space Agency, Airbus and the University of Leicester have joined forces to offer the first Space Engineering Technician apprenticeship.

Apprenticeships are a great way to learn the skills needed to start a career in a huge range of exciting sectors. This exciting new opportunity will play a key role in helping the UK to become a world leader in the space industry.

The UK space sector is thriving, generating an income of £14.8 billion, employing 42,000 people and supporting a further £300 billion of economic activity through the use of satellite services.

The space engineering apprenticeship will ensure we have the talent needed for the UK space industry's continuing growth.

Apprenticeships will play a vital role helping to provide the skills businesses and our economy need to recover and grow after coronavirus. To support more people to take up a high quality apprenticeship so they can secure a great career, the Government is offering all employers £2,000 for each new apprentice they hire aged under 25, and £1,500 for each newly recruited apprentice aged 25 and over. This includes taking on an apprentice who has been made redundant.