

FAQs

techUK Data Centres Programme Opportunity to partner with UTC Heathrow

December 2020

What are UTCs?

University Technical Colleges (UTCs) are UK government-funded schools that are committed to transforming lives through education. Open to learners aged 14-19, UTCs are dedicated to an alternative way of teaching technical and scientific subjects and creating the engineers, scientists and technicians of tomorrow. They orientate their curriculum to local business needs. UTC Heathrow, for instance, has 247 learners with number increasing by 20% every year and partners with the aviation sector. (see "More about UTCs" below).

What is UTC Heathrow offering?

UTC Heathrow, based less than 20 miles from Slough's Industrial Trading Estate, has agreed to redesign its existing curriculum to add the data centre sector as a new career path option. This opportunity has arisen because the UTC, which has to date provided bespoke training for those seeking careers in aviation, wants to widen the curriculum to include another sector that can provide a career destination of choice for their students.

This means that employers within the data centre sector can work directly with a college full of learners who will spend the next 2-4 years developing their skills and understanding of the industry and preparing themselves for the world of work. Participating organisations will have access to an ongoing supply of talent, trained by specialist teachers for viable jobs within the sector who will be based locally. In the longer term this allows operators to protect their talent pipeline and provide skills, knowledge, qualifications and employment for the next generation.

Is this just a one-off?

Yes and no. While this offer to redesign the curriculum is something of a one-off, it represents a strategic opportunity for the sector and could provide a template for similar approaches in other UTCs near data centre clusters elsewhere in the country.

What do operators need to do?

The UTC is calling employers within the data centre industry to work in partnership with them: a maximum of ten operators and suppliers are needed to work together collaboratively to design the specialist technical curriculum, promote the UTC programme, and provide work experience placements in and around the Slough area, the largest data centre cluster in the UK. A large part of the UTC's curriculum is based around project-based learning, and industry partners are needed to help define and deliver this.

What does that mean in terms of resource?

In terms of resource, the UTC needs a collective contribution of £120K per year from the industry (£12K per partner) to ensure the programme is fully funded. Around 30 days of staff time will also be needed. It is not a trivial undertaking for operators so it does need top level engagement.

What is the timeline for employers within the DC sector to commit?

Commitment is required by the 31st January 2021.

Why does the UTC need ten partners?

Having opened 48 UTCs over the past ten years, the Baker Dearing trust has found that ten is the optimum partner number. It ensures that they have a curriculum that is truly representative of the sector's needs and sufficient access to project based learning opportunities, it also reduces the financial burden. Too many causes confusion and can impair focus.

How can operators be confident that this will help solve their longer term sector skills shortages?

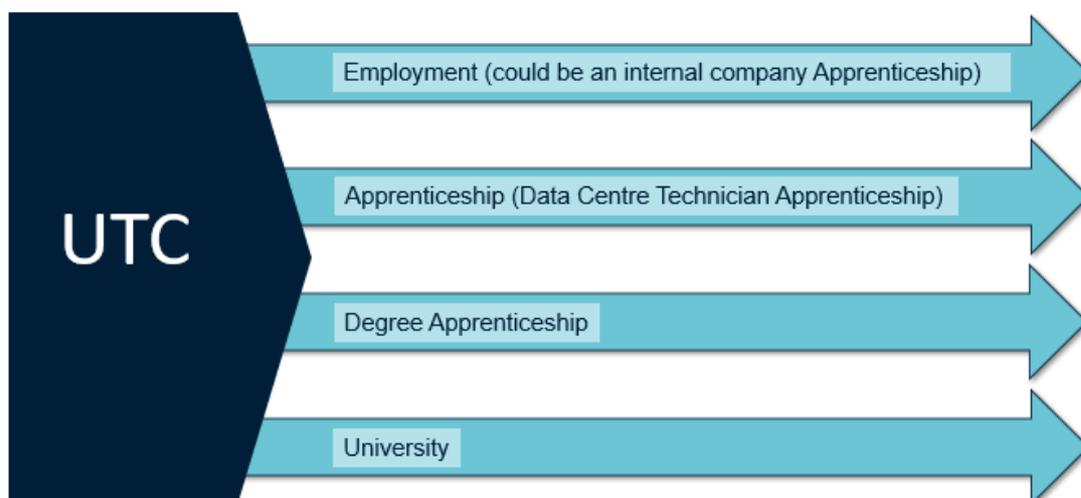
Evidence from other UTCs (see slides) demonstrates that where UTCs and employer teams work together to develop the skills and attributes of students, the proportion of students moving onto apprenticeships and degree apprenticeship i.e. straight into the workforce are highest, well above the national average, and range from 25-50%.

Moreover, what has been done to date elsewhere is clearly not working and has not solved our long terms skills shortage. National trends in uptake of technical subjects make depressing reading. This will be the first time that mainstream education and the data centre sector work together to start the journey of providing a clearly defined and repeatable path into the sector.

How can we measure success?

The success of all UTCs can and is measured in the student destination information, there are four main post Data Centre UTC pathways at 18/19

- University
- Apprenticeship (The Data Centre Technician Apprenticeship is being developed, level 3 and 4 apprenticeships standards for cyber security, data, etc. are already available)
- Degree Apprenticeship (this is in discussion)
- Employment (this may be linked to an internal company bespoke apprenticeship)



What is techUK's role?

At techUK our role in this initiative is to inform the sector, bring people to the table and provide a conduit for operators to talk to each other and to educational partners. Data centre operators and suppliers, often competitors, have worked collaboratively together with us on issues of common concern and delivered successful outcomes that have benefited everybody. We want to show that the sector can work together to address its own skills shortage.

We are working closely with the Baker Dearing Trust who have successfully established 48 UTCs since 2010, and with UTC Heathrow. CNet Training has kindly agreed to share part of their curriculum to provide bespoke data centre training content for the 2-4 year programme.

Why do we see this as an opportunity?

The data centre sector is suffering an acute skills shortage, both short term and long term. We are working with engineering and technical communities through professional bodies like the IET and IMechE and with unions within sectors that are being forced to furlough or lay off their technical staff to explore the potential for redeployment within the sector.

This is a step in the right direction but we need to work harder collectively as a sector to tackle our longer term skills shortage. techUK recently acquired Tech Partnership Degrees, who work at degree level to ensure that courses have the right content and that graduates have the right skills to work within the tech sector.

However, we still need to address the gap at 14-19 where many career paths are decided, and data centres are rarely if ever, front of mind. This is a chance to change that, initially at local level. We see partnership with UTC Heathrow as an opportunity for industry leaders within the sector to be part of the first Data Centre University Technical College and be involved in shaping the data centre curriculum in the UK.

More about UTCs

The purpose of UTCs is to educate and equip young people with the relevant skills and knowledge that can be applied directly to the workplace and help them to prepare for a career.

Each UTC is created out of a need to increase local industry skills and jobs. The creation of a UTC brings together an ongoing partnership between local organisations, local universities and government to develop a UTC which focuses on teaching the skills that are in demand by local industries and are in short supply. For example, UTC Heathrow has historically concentrated on aviation training and development.

Alongside the usual core academic curriculum, UTCs are comparable to a combination of schools and apprenticeship training. Technical and project-based learning is a crucial focus for UTCs, it teaches young people a different way of learning, often with industry-relevant projects developed in partnership with local organisations. This gives learners industry experience and helps them to develop skills that will make them highly desirable when it comes to looking for employment. Unlike standard school hours, learners are prepared for the commercial world, they attend UTCs from 8.30 am to 5 pm and dress appropriately for a commercial environment.

Useful links

University Technical Colleges: <https://www.utcolleges.org/>

techUK Skills and professionalism group: <https://www.techuk.org/data-centres-programme/data-centre-professionalism-steering-group.html>

CNet Training: <https://www.cnet-training.com/>

Tech Partnership Degrees: <https://www.tpdegrees.com/>

techUK contact: emma.fryer@techuk.org

UTC contact: mhalliday@utcolleges.org

CNet contact: AStevens@cnet-training.com