

## Lincoln UTC A college for science and engineering



## Contents

- 03 Principal's Foreword
- 04 Results and Destinations Success 2020
- 06 T Levels
- 07 Institute of Technology
- 10 Teaching Assistant Vacancy
- 11 Virtual Tour
- 12 PAN Consultation
- 14 Applications for Sept 2021

## Principal's Foreword

As the latest Coronavirus measures take effect, it could be argued that the only certainty is the continuing uncertainty. It is heartening that the politicians on all sides seem to have one thing that they agree on which is the importance of keeping schools open. We have been told that the GCSE and A Level exams will go ahead in the summer, albeit slightly later and with a more 'compressed' programme'. The additional three weeks (due to the delayed start) will be some help for students in preparing for the exams but it will not fully compensate for the impact of last year's lockdown.

One of our goals, here at the UTC, is to prepare students for the world of work. The world of work has, for so many people, changed dramatically since March. Working from home, either wholly or for part of the week, is the new norm in so many sectors and education is no exception.

We have had a great half term. Our new students have settled in well and are working hard. Students and staff alike are happy to be back in the UTC. We are currently making plans to return to our full timetable in January but throughout November and December we will be continuing with our staggered day and the smaller class sizes.

Our 'Covid-cautious' timetable is working well but there is no escaping the fact that the students currently have a shorter day than normal. If students are to achieve their potential in this year's examinations they will, like so many people in employment, have to accept that some working from home may be a vital part of the mix. We will not be setting homework for homework's sake, as some schools do, but we would urge all students, over the coming months, to reflect on their working practices and set aside some time for independently consolidating on the work they do whilst they are on-site. We will continue to support students in every way we can but, now more than ever, a little independence and self-discipline will be the key to success.

John Morrison
Principal of Lincoln UTC

## Results & Destinations Success 2020

Students at the UTC achieved outstanding A Level and GCSE results in August 2020.

A Level results were strong even before the government's U-turn, with a 100% pass rate. However, following the welcome decision to honour centre assessed grades several of our students saw an increase, with 64% of all students achieving A\*-B and 86% achieving A\*-C.

81% of our GCSE students achieved between a grade 4-9 in both English and maths, and 89% passed their specialist engineering qualifications where the grades awarded were based on coursework completed before the lockdown.







Lincoln UTC has a strong track record of supporting students with their next steps and our Post-16 students continue to be very successful in securing their desired place at university or in industry.

In 2020 71% of our students chose to continue to higher education. 100% of those students secured a place at university, and 82% were allocated their first choice. All students going to university chose STEM related subjects. Course choices included physics, chemistry, biomedical sciences, mechanical engineering, software engineering, computer science, accounting/finance, and radiotherapy/oncology.

Jay Wyatt-Jones achieved AAA\*A\* in maths, physics, biology and chemistry. He started a four-year degree programme in Physics MPhys, BSc at the University of Leeds in September. Jay said: "I'm so happy to have achieved results that will allow me to take the next step on my dream career path. I've studied at the UTC for the last four years, and the specialist focus on science and maths has allowed me to thrive in the subjects that are most important to me."

Students who chose not to follow a higher education route were very successful in securing prestigious apprenticeships. Thomas De Serio was offered full sponsorship by P&O Ferries Ltd. for a higher engineering apprenticeship in association with the British Merchant Navy and the Humberside Maritime College.





Thomas said: "I've studied at the UTC for the past four years which has allowed me to focus on the subject of engineering in depth and within excellent facilities, therefore I had a wealth of experience to draw upon during the apprenticeship application process.

My sponsorship with P&O means that my tuition fees will be paid in full and I will also receive a training and travel allowance throughout my studies. Upon completion I will qualify with a certificate of competency as an Officer of the Watch and a Higher National Diploma in Marine Engineering."

Edward Richardson Lee became the third UTC graduate to secure an apprenticeship with local engineering firm Fairfield Control Systems. Ben Searson, Lead Design Engineer at Fairfield said: "Fairfield's has developed a close partnership with Lincoln UTC since its inception in 2014. We have offered several work placements to UTC students and two UTC alumni have also been successfully recruited as apprentices, one of which has now been promoted into a full-time position as a Design Engineer. We are excited to welcome a third UTC recruit to the team."

### T Levels

Lincoln UTC has been selected to as a provider for the first wave of new T Levels from 2022, We will be the ONLY provider in Lincoln offering a T Level in engineering.

T Levels are an alternative to A levels, apprenticeships and other 16 to 19 courses. Equivalent to 3 A levels, a T Level focuses on vocational skills and can help students into skilled employment, higher study or apprenticeships.

Each T Level includes an in-depth industry placement that lasts at least 45 days. Students get valuable experience in the workplace; employers get early sight of the new talent in their industry.

T Level students will spend 80% of the course in the classroom, learning the skills that employers need. The other 20% is a meaningful industry placement, where they put these skills into action.

Find out more about T Levels here - <a href="https://www.tlevels.gov.uk/">https://www.tlevels.gov.uk/</a>



## Institute of Technology

Institutes of Technology are unique collaborations between employers, higher, and further education providers. They are specialising in delivering higher-level technical skills which aim to help close skills gaps and improve productivity. The Government is backing the new institutes with £170million of capital funding.

The Lincolnshire Institute of Technology is being established to offer an exciting range of high-level technical qualifications in the areas of agri-tech, food manufacturing, digital, energy, and engineering.

A unique collaboration between the University of Lincoln and employers and Further Education providers across Greater Lincolnshire aims to open up opportunities for students to gain industry-relevant skills to help tackle some of the key challenges facing the technology industries.

#### Institute of Technology Courses at Lincoln UTC:

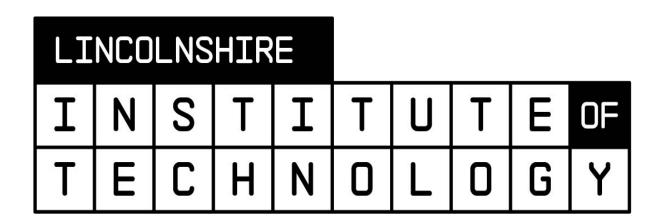
Lincoln UTC is proud to be a Lincoln Institute of Technology partner. The courses we offer are:

#### BTEC Level 3 Extended Diploma in Engineering (3 A Level equivalent)

Students in KS5 can study triple engineering and work towards the Pearson Edexcel BTEC Engineering Extended Diploma, which is equivalent to three A Levels. For this vocational route there are fifteen lessons a week.

#### T Level in Engineering

Lincoln UTC is an approved centre for the first wave of T Levels starting in September 2022. T Level students will spend 80% of their course in the classroom, learning the skills that employers need. The other 20% will be a meaningful industry placement where students have the opportunity to put these skills into action.



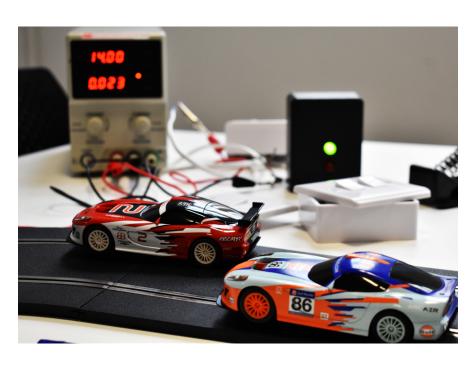
## **IOT Project Workshops**

As part of Lincoln UTC's partnership with the IOT we will be offering a series of project days to local secondary schools.

#### Scalextric Engineer

Playing with Scalextric is easy, but could you design and build a network of traffic lights that would automatically stop the cars at junctions if they were on a collision course?

A one day project that will highlight some key concepts in electrical circuit design and help develop practical skills.



#### **Lego Engineer**

Building a Lego Technic robot is, literally, child's play...if you are following the instructions to make one of their standard models.

It is a bit more of a challenge, if you have to design something to do a specific job.

In this project students will design and build a fully functioning scale model of an automated warehouse and write the programme code to control the robots.

#### Go Kart Challenge

Inspired by the class children's engineering set, Meccano, Lincoln UTC has created a giant set...big enough and strong enough to make cars, cranes, diggers, and bridges that actually work.

Quick and easy to bolt together so that you can try different designs.

Could you design and build a go kart from scratch, in a single day...and then race it against other teams?



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## Computer Aided Design & Computer Aided Manufacture

#### **Rapid Prototyping Taster Day**

Lincoln UTC has a wide range of industry standard CNC prototyping machines (lathes, mills, laser cutters, plasma cutters, filament & resin 3D printers.

The challenge on this day is to use CAD/CAM to design and manufacture a 'hands free' alcohol gel dispenser.

#### Working together to develop the skills for success in industry and university

Specialists in science, technology, engineering and maths in partnership with industry and the University of Lincoln

## Teaching Assistant Vacancy

Full time or part time, £19,000 per annum (pro rata) term time only

Lincoln UTC wishes to appoint a new teaching assistant to join our small but exceptional team (judged to be outstanding by Ofsted). The college is smaller than most schools but is growing in popularity. We currently have just over 300 students on roll (up from only 235 last year). We want our SEND team to grow in line with this, in order to continue meet the needs of all our students. Lincoln UTC currently has 23 teaching staff and a team of 6 teaching assistants. We are an uncommonly 'tight knit' and supportive community. Behaviour at the college is very good and the relationships that exist between students and staff are exceptionally positive.

The successful candidate will be actively involved in all aspects of college life and work with students across multiple subject areas, alongside the existing team.

Prior experience would be an advantage but is not a pre-requisite. Full training and support will be available. This would ideally be a full time, permanent position (term time only) but we will be happy to consider applications from strong candidates who would prefer a part time position.

For further details, for an application pack, or to arrange a visit please contact Natalie Smith on 01522 775990 or email HR@lincolnutc.co.uk.



## Virtual Tour

We are now lucky enough to have a Virtual Tour of our wonderful facilities, created by Scape 360. You can visit our stunning grade II listed building, industry grade engineering workshops, and modern science laboratories with one click.

To explore the UTC through our Virtual tour visit - <a href="https://my.scape360.co.uk/tour/lincoln-utc">https://my.scape360.co.uk/tour/lincoln-utc</a>.





### PAN Consultation

Consultation on reduction of Published Admissions Number (PAN) from 160 to 120 in year 10 and from 160 to 100 in year 12.

A formal consultation process with regards to changing the admissions number for Lincoln UTC will commence Thursday 1st October 2020, and will conclude at midnight on Wednesday 11th November 2020. In line with DfE requirements we are consulting with key stakeholders.

On its inception and opening (in September 2014) Lincoln UTC had a PAN of 160 students for both entry into year 10 and entry into year 12, giving a notional capacity of 640 students in total. This figure was set before the local demand for a specialist education in science and engineering was known. Initial thinking was that the UTC would recruit broadly not just from Lincoln but from all parts of Lincolnshire. Funding was available at the time to subsidise transport for students travelling from distant parts of the county. Although the UTC does still attract some students who travel considerable distances, the withdrawal of funding for travel has affected their numbers.

Lincoln UTC only moved into its current building in its second year of operation (September 2015). The initial PAN was set before the physical limitations of our building were known. The UTC's buildings cannot accommodate 160 students in a year group.

The physical size of the buildings is the principal reason for proposing a change to Lincoln UTC's PAN. As a listed building with little or no outside space there is no scope to extend or expand the premises.

In the current academic year (2020 / 21) the total number of students on roll is 310. A revised PAN and a total capacity of 440 would still be more than sufficient to meet the demand for the UTC's offer and to ensure that all students who wanted to attend were offered a place. The proposed PAN is 120 students in each of years 10 and 11 and 100 in each of years 12 and 13.

Lincoln UTC only has 26 teaching spaces. 3 of these are specialist workshops for engineering project work. 23 are able to be used as teaching classrooms.

The practical nature of Lincoln UTC's curriculum means that group sizes are smaller than in some schools. Maximum group size is set at 24 students. For some workshop activities group sizes are even smaller.

If Lincoln UTC had 120 students in each of years 10 and 11 we would have 10 teaching groups in Key Stage 4, all of whom would be in lessons at the same time (using 10 of the 23 available rooms).

Lincoln UTC offers a choice of 9 A Level subjects to Post 16 students. Approximately half of the Post 16 students follow an A Level programme of study. Approximately half specialise in engineering (Level 3 BTEC equivalent to 3 A Levels). There are three teaching groups for engineering in each of the Post 16 year groups. Most A Level subjects only have one teaching group. A Level maths typically has two groups.

There are 13 teaching groups in year 12 and another 13 in year 13. As the Post 16 students do have independent study periods, not all of the 26 groups will be in lessons at the same time. At any given time there will be (on average) 13 Post 16 lessons timetabled ... using all of the remaining 13 rooms.

Accommodating 440 students would require a timetable with 100% room occupancy. Lincoln UTC simply does not have the physical space to go beyond this figure.

This document is being sent directly to the following stakeholders:

- Lincolnshire County Council
- All parents / carers of current students at Lincoln UTC (sent via InTouch)
- School governing body
- Headteachers / Principals of all schools within our catchment area
- Nottinghamshire County Council, as they have schools within our catchment area
- All local authorities bordering on Lincolnshire

Recipients are welcomed to respond by emailing comments relating to the proposed change to <a href="mailto:enquiries@lincolnutc.co.uk">enquiries@lincolnutc.co.uk</a>. The purpose of the consultation will be to receive feedback on the proposal, and the responses to then be collated and presented to the governing body for full consideration. The outcome of the consultation will then be communicated to all parents and posted on our website.

Yours sincerely,

Mr John Morrison

## Applications Open for Sept 2021

On Saturday 14th November we will be hosting an Open Event. Appointment slots can be reserved on a first come first served basis by registering at <a href="https://www.eventbrite.co.uk/e/november-open-saturday-tickets-119894107503">https://www.eventbrite.co.uk/e/november-open-saturday-tickets-119894107503</a>.

If you are unable to make this date we are currently offering all prospective applicants the opportunity to come into the UTC for a personal tour during the school day, to book please email <a href="mailto:admissions@lincolnutc.co.uk">admissions@lincolnutc.co.uk</a> or call 01522 775990.

