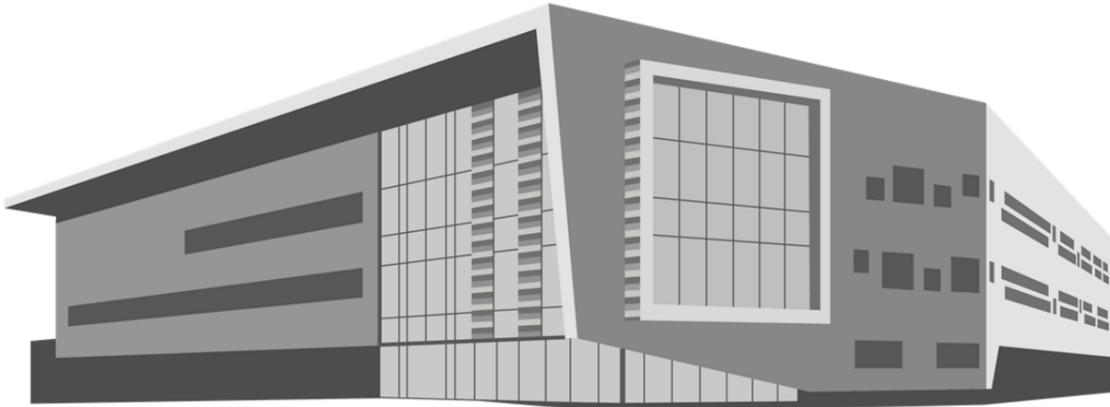


# F1 in Schools



**nuast**  
Nottingham University Academy  
of Science and Technology

Towards the end of January, NUASt was represented for the first time in the F1 in Schools regional finals. This took place at a venue in the Smethwick area of the West Midlands.

A number of different teams from across the Midlands region competed in the F1 in Schools challenge.

Teams of Year 10 and 11 students have spent the last 3 months in enrichment time preparing for it. Students designed, tested CAD Fusion models of their F1 cars considering their aerodynamic performance before manufacturing their teams design using the CNC machines.

The car prototype models shot across the track at great speed powered by CO2, much to the delight of competitors and spectators alike. In addition, the students had to create a display and present their ideas to a panel of judges.

The students raced their F1 car design in a drag race against other schools and the clock for the fastest time possible. Points were awarded for each activity and the team with the most points in each classification progressed through to the National final taking place at Silverstone.

Unfortunately our teams did not progress this year but we did finish a respectable mid table. The students have displayed an amazing amount of resilience, with a clear focus and determination to win next year's competition.

Mr Goodere-Dale



## Safeguarding & Preventing Radicalisation



Mrs Fountain



Mr Tapp



Mr White



Mrs Astle



Mr Edwards



Mr Cox



Mr Smith

If you have any concerns about your safety, safety of other students or about any extreme behaviour, please speak to the above members of staff.

## Parent Maths Puzzle

### The Powerful of the Crossnumber

What is the sum of the digits in the completed crossnumber?



#### Across

1, A cube

3, A power of 11

#### Down

2, A square

To check your answer email Ms Barr:  
pbarr@nuast.org

# NUAST News

February 2018

## Message from the Principal

This has been a relatively short but busy half term. Students returned to NUASt following the long Christmas break and have quickly settled back into their studies. All students have now taken part in mock examinations and they will be busy over the next few months preparing for GCSE, A level and BTEC assessments. Year 11 and Year 13 progress review parent's evenings were very well attended and I would like to express my thanks to you for attending these important evenings.

As part of our support offer as students move towards employment, further or higher education we have arranged for ideas4careers to deliver independent careers advice sessions to students. Each student in Year 11 will have a careers interview and students in Year 12 and 13 can book interviews if they wish to take advantage of talking to a careers advisor. A number of companies are contacting us directly with regards their apprenticeship vacancies. These will be communicated to students via subject staff.

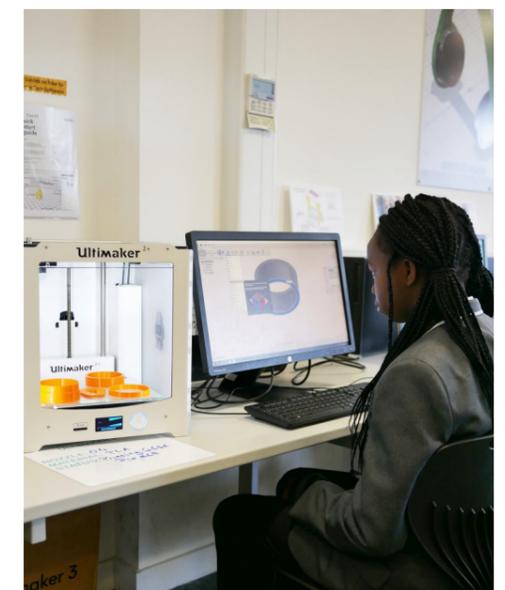
I am delighted to say that two of our Year 13 students have secured offers from Oxford University for study next year. This is a remarkable achievement and I offer my congratulations to them and the other sixth form students on their successes in securing University offers for study next year.

Intervention sessions have begun to take place after school and on Saturdays. Please support your child in attending these sessions as these will enable them to significantly improve their performance in this summer's examinations. Subject staff will contact parents/carers via letter or telephone to inform them of the intervention sessions which will be available.

Parking reminder - could I ask that if you are driving to school that you only park in the designated spaces and do not park on single or double yellow lanes or in resident parking bays.

I would like to wish you all a restful half term break and look forward to the start of the new term on Monday 26th February.

Mr White



# Vex Robotics comes to NUASt

Students from around the country took part in a regional VEX Robotics Competition at NUASt in January.

The competition involved students designing and building a robot that could compete against others in order to stack plastic cones as high as possible on top of various goals.

This was the first time that NUASt hosted the competition, in which local teams compete for a place in the national finals and then hopefully to the international finals in the USA. Schools including Nottingham High School and Colmers School in Birmingham took part, in addition to a number of teams from as far as London and Worcester.

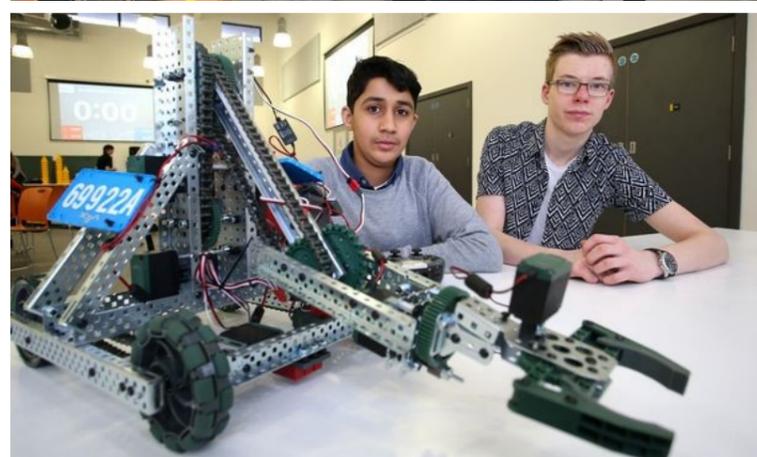
Mr Wood who leads the NUASt team commented: "It was fantastic to see such a considerable number of students from all year groups working together and watch as their interest in robotics just keeps growing. The teams showed the utmost dedication practicing in their spare time at lunches and after school, I'm very proud of their commitment."

The event was supported by local business Rolls Royce who provided two engineers to act as judges for the day.

Bridie Gaynor, VEX competition support manager, said "What VEX uniquely provides is the ability for children to turn concepts, such as control systems and engineering interconnections into something physical. The high level of professionalism and teamwork exhibited is commendable and the students evidently enjoy themselves, bringing an exciting energy to the competition."

NUASt has submitted two teams this year which mainly consists of Year 10 and 13 students. Engineers work together with Computer Scientists to design, build and test a robot in preparation for each event. The NUASt teams will be competing in Milton Keynes and Sheffield in the coming weeks in the hope of further qualification to the next round.

Mr Wood



# The Home of Code Breaking

Our Year 12 and Year 13 students visited Bletchley Park in Milton Keynes this month, where Alan Turing and his team of programmers managed to crack the German Enigma machine during WWII.

It is said that the efforts put in at Bletchley Park shortened the war by many years and saved countless lives.

Students experienced a code breaking lesson where they were shown how common ciphers work and got to go hands on with an actual Enigma machine. This was of particular interest to our KS5 Computer Scientists and Mathematicians who both have to work through encryption and algorithm type problems in their courses.

Later on in the day the students explored the campus, visiting the Bletchley Park house and were given a guided tour on the history of the site by a local volunteer. There were even props on display from the recent film The Imitation Game (2014) for students to look at.

Owen Carragher, a Year 13 Computer Scientist commented: "It was great to see how the skills we have learned in our encryption lessons were born here at Bletchley Park by Alan and his team."

Mr Wood



# Raising the Grade in English

Eleven Year 10 students enjoyed a day out at Nottingham Trent University (NTU) this term where they participated in a Raising the Grade Conference. Snacks and drinks were provided in abundance, as were the variety of engaging and insightful GCSE English workshops that all students were invited to participate in. The workshops were varied: An Inspector Calls, Adding bite to your writing, Identity poetry, and Hip Hop Shakespeare (a favourite of ours) were all tailored to meet the demands of the GCSE exams. The day ended with a poetry competition where students were asked to stand up and present their poems to the audience. Embracing a challenge, many of our brave NUASt students presented their poems to other students and staff, and our very own Ovi won the competition - well done Ovi! Adding insult to other schools, many of our amazing students were nominated by staff for participating and engaging with the day. It was great to see our students engage with such an informative, useful day - see you next year NTU!

Mrs Lewis

