

Engineering Education at UTC Oxfordshire

UTC Oxfordshire is a mixed University Technical College located in Harwell, Oxfordshire, England. It was opened in 2015 by Professor Brian Cox and caters for students aged 14–19 years specialising in Science and Engineering. Like all UTCs, UTCO is funded by the Department for Education (DfE) to the same level as a 'normal' comprehensive school.

Our aim is to become a world-class centre of excellence in science and engineering education for students. Our students are already well known for having the skills, attitudes, behaviours, knowledge and experience that the world's leading employers are looking for. They are well connected with access to over 40 industry partners; locally based national and international organisations such as UK Atomic Energy Authority, RM Education and MINI Plant



Oxford, which will give students great opportunities for employment and sponsorship. UTC Oxfordshire students have



secured places at Oxford University, Cambridge University, and Russell Group Universities as well as degree apprenticeships with BMW Mini, Williams F1, Mercedes AMG Petronas F1 team, Airbus, Culham Centre for Fusion energy and many more. We are currently judged as 'good' by Ofsted. Our students reside across the breadth and depth of Oxfordshire, some travelling long distances to attend school. We strive to create a workplace

atmosphere to prepare our students for their futures including a business dress code, longer working day and first name terms to develop a team atmosphere between students and staff.

UTC Oxfordshire teaches engineering as a standalone subject through the GCSE equivalent Cambridge National qualification to years 10 and 11 and the BTEC Extended Diploma to years 12 and 13. All of our students in the sixth form study a level 3 mathematics qualification to support their engineering. Our engineering teachers have had industry experience before coming to teach at UTC Oxfordshire and the department is supported by a qualified technician. Through the engineering



qualifications and work with industry partners we are developing the use of 3D printing, Laser cutting and CNC machining. We have a fully functional welding bay that offers TIG, MIG and ARC welding experiences and our students learn CAD as part of their course.



During the Covid pandemic our students made visors for the local John Radcliffe Hospital to support with the initial lack of PPE for key workers. Integral

to the work of the engineering department at UTCO is the relationship with the local employers of the Thames Valley ensuring that our students are part of the employer pipeline to fill a recruitment gap for the local global industries such as BMW. We work closely with these partners to ensure that the students gain the employability skills that this sector requires for the future.