



NEWSLETTER

Finishing with a BANG!

On Friday 9th December, Waterfront UTC organised a Careers Fair which exceeded our expectations.

We had the opportunity for nearly 30 businesses and organisations surrounding construction and engineering to visit our students, providing insight into careers and apprenticeships.

Our sports hall was filled with positive, enthusiastic engagements for the duration of the event, where some students didn't even want to leave and instead continued engaging with all present employers, whether they felt they were relevant to their desired field or not.

“Students were very engaging and well prepared.”



“...positive engagement with students”

Students were able to discuss all questions surrounding careers, apprenticeships and work experience, while other students even took it upon themselves to prepare and distribute their CV to employers that best suited the industry they long for.



Kier have already shown their interest in working with Waterfront UTC for apprenticeship week!

Students were also presented with bingo cards which allowed them to gain stickers from employers who they engaged well with. It is safe to say the all the bingo cards were not only completed but they were overflowing with stickers. The feedback we have received from the employers has been overwhelming including compliments to our students in how well they engaged.

We had a great variety of employers attend this term such as; **Kier, Knights Brown, BAE Systems, Carter Synergy, Pantera, RB Plant, Apex Lifts, Arcelor Mittal, Alltask, Willmott Dixon, Redrow, Laing O'Rourke, University of Greenwich, NHS, Scotline, SSTG, Mace, RAF, British Armed Forces, Uniper, Kent Police, Kent Fire & Rescue, British Transport Police, National Grid and ISG.**

All of whom had a great impact on all of our students.

We were lucky to have the chance to demonstrate how eager our students are when it comes to interacting with employers.

We cannot thank them and our students enough for their dedication towards the event.



Alice climbing to success with Redrow

“Hi my name is Alice and I currently work for Redrow homes as a rotational undergraduate. My job role and degree is a three year contract of which consists of rotating around each of the departments such as land and planning, Technical, Commercial, Sales and being on site, with the final year of choosing which department I would like to pursue a career in. The best part of my job role is that I get to explore all aspects of construction and not being set on one strict career path as well as this I get to travel to Wales six times a year for university of which everything is paid for Degree, hotels, food, drink and travel expenses (Bonus!). It's also an amazing experience to witness everything you learnt at Waterfront UTC come to life in the real world whether that's a site visit or documents you have had to produce for your BTEC's! I was a student at Waterfront UTC from year 10 through to year 13. I was originally at a normal academic school in the area when it was advertised that waterfront UTC was opening. I never started UTC thinking that the construction industry was for me especially with it being a male dominated industry! At



Waterfront, I was firstly attracted to the atmosphere and that it was smaller than my previous school therefore the teachers treated you in a more professional manner and there was a higher opportunity for 1-1 support. At Waterfront UTC, there are so many opportunities available such as employer engagements, work experience on site with large companies such as O'Halloran and Obrien. You were also given the opportunity to work with specialist equipment such as CAD systems and surveying tools. Construction is everywhere especially within the Medway towns meaning that so many employment opportunities are available of which consists of many benefits including: great pay and bonuses, holidays, shares and pension schemes, changing people's lives and make a positive impact on the community that they live in. I personally feel that Waterfront UTC benefited me massively and helped me



Lifting Team GB for GOLD!

My name is Silver, I am 16 years old and while I study at Waterfront UTC I also compete on an international level in Olympic weightlifting for Team Great Britain.

My hobby began when I was 11 years old at a small club in Maidstone, however I also grew up watching both my parents weightlift. Ever since I started watching competitions, seeing other lifters compete in heavyweights internationally for medals I knew I wanted to get to the same level. I never anticipated how far this journey would take me as my dream was to win a competition no matter how big or small however, the more I trained, the stronger I became so now my goals and ambitions aren't out of view anymore and are achievable.

I have competed over the years starting from small competitions held at my club, to the British Championships in 2019, where I placed second in my first ever national competition then later winning the British and English championships in the following years. I then advanced to competing in the 2022 European championships in Poland as an under 17 in the 67kg category representing Great Britain. Despite my journey consisting of hard work it has been amazing and will continue to surprise me and guide me through life. From this, I hope to progress to the World Championships and Olympic games, both of which I have qualified for as a 16 year old however, I still need to achieve the qualifying weight for next year when I'm 17 years old.



ABOUT THE SPORT

Olympic weightlifting is a sport included in the Olympics consisting of two different lifts, which are known as 'the snatch' and 'the clean jerk', which both require strength, speed and technique. These lifts sum up to give you a total which is used for your entry into competitions. In competitions, lifters are put into groups depending on weight, age and are then put against other lifters in their groups. Each group lifts at different times throughout the day with 3 attempts on each type of lift. You are scored by 1-3 judges, depending on the importance of the competition, who are situated in front of the platform and they determine whether your lift is valid or a fail. The rank you receive is determined by your total based on your highest snatch and highest clean and jerk.

Competitions are held locally, nationally and internationally every year and vary in how often they take place for various reasons however are all very important. Local competitions are held frequently every year all over the country and are often either used for small communities to compete for experience in competitions,



to have fun, or to qualify for bigger competitions like nationals. For example, there are local competitions held every few months at Crystal Palace Nationals Sports Centre hosted by Crystal Palace weightlifting club which I myself have attended many times to qualify for other national competitions, but I've also attended these to watch others from my own club compete to gain confidence and experience in competition. There are many national competitions held every year that tend to be held in better and bigger venues with more professional organisations and preparation, with bigger audiences resulting in more pressure. These competitions also result in official titles being bestowed onto the winners and medallists of these events. An example of a national competition is the British age groups, a competition set up and organised by the official British weightlifting organisation that consists of women and

men under 10,12,15,17,20 and 23 age categories all competing in the same venue, usually over 2 days.

To compete in any national competition, you must have reached the qualifying total and enter yourself into it with that total, if you don't manage to reach the total needed before a certain date then you're not allowed to lift in nationals. There are many different international competitions that can take place, but the main 4 are The European Championships, The World Championships, The Commonwealth Championships and of course the Olympics (or Youth Olympics). To go to these and have the chance to represent Great Britain you must first receive the qualifying totals that are set by British weightlifting (BWL), these totals are called pathways. For instance, the Olympic pathway is the total you need to hit for you to get into the Olympics. On occasion, if you're extremely close to the needed pathway then you may sometimes still be chosen for the competition.

For internationals, you will be selected by the leaders of the BWL based on your application of interest which you will need to submit after completing your qualifying totals.

TRAINING

In preparation for a competition, my coach will program me training days and what to do for each session. This usually runs for around 6-9 weeks before a competition.

The intensity of training varies through out the weeks, with the first couple of weeks starting off relatively easy. This then switches to more intense and hard training for the weeks in between before easing off again for the last week and a half allowing my body to rest properly before competing.

During the first and last weeks where the intensity is relatively easy, I train 4-5 times a week through Monday to Friday while using my weekend as rest days and then when the intensity picks up in the middle weeks I will train 5-9 times a week, including double sessions from Sunday to Friday with Saturday being my only rest day. This can vary depending on the importance of the competition.

I also have to maintain good discipline outside of the gym for example my diet and other various things which increases the effectiveness of my training.

BALANCE, MANAGEMENT & ACHIEVEMENT

Although my dreams and ambitions are growing with the success of my weightlifting, I've had to make sure my training doesn't affect my studies too much. I keep effective time management in order to stay on top of my workload and complete my work as and when I receive it as training takes up an immense amount of my time in the week and sometimes, on occasions, my weekend. My time after school is spent finishing schoolwork I have and my evenings are spent at the gym. Training and my schoolwork are my two main priorities which unfortunately means I have to sacrifice a lot of things including social time with friends and also my family at times. I also have to maintain good discipline outside of the gym for example my diet and other various things which increases the effectiveness of my training.



Despite of these sacrifices, representing team GB and competing internationally for my country, for a sport I've dedicated everything to for the past few years is the best feeling in the world and a dream come true. For this to actually happen to me is one of the biggest honours I could ever have and makes all my sacrifices, hard work and training worth it. I am able to lift on a platform in another country alongside fellow GB lifters as well as witness lifters from other countries compete, some of which, are the strongest and best in the world, which is just phenomenal. Although weightlifting is an individual sport there is also a team factor surrounding it, as you travel to venues as a team and the other members of Team GB are supporting and cheering you on throughout the competition which was a nostalgic



experience that was nothing like I had experienced before.

These experiences are so inspiring and witnessing these competitors who I look up to, strive to become and even try to surpass, fuels my drive to become bigger and better to aim for the top!



Institute of Civil Engineering project



Waterfront UTC hosted a project supplied from the Institute of Civil Engineering (ICE) called CityZen, which was designed to show students what a career in civil engineering offers, while supporting STEM subjects including design and technology and geography. The game consisted of four weeks with different civil engineering challenges, where students competed against each other in teams to create their own cities, while faced with scenarios on bridge building, park renovation, sustainable housing and crisis management.

We were lucky to have Katherine from Laing O'Rourke visit Waterfront UTC to help mentor our students with their progress, their decision making and advice on how they create their videos to capture their reasonings being their projects. She was able to offer the students insight from her experience.

Fabrication at Arcelor Mittal

Arcelor Mittal Kent Wire is a wholly owned subsidiary of Arcelor Mittal Hamburg which is one of Europe's leading wire rod manufacturers and a member of Arcelor Mittal, the worlds largest steel provider.

Kent Wire has also grown to become the country's leading manufacturers of fabric reinforcement, which is supplies to the construction industry in the UK, Ireland and Norway.



Mr McLean & Mr Kirk were able to see the technology and planning that goes into each fabrication project.



Staff were able to visit Arcelor Mittal's warehouse, which has a capacity of 15,000 square meters and witness what goes on behind closed doors within fabrication in the workshop. They were able to see the technology and planning that goes behind each project as well as an example of some fabrications created.


ArcelorMittal

Smooth Sailing

My name is Frankie Lawrence and my sport of interest is sailing. I have a three boats which despite looking similar, are all different. The main boat that I sail is called a 29er, which is a double handed boat, meaning it needs two people to sail it. This boat consists of a hull made from fibreglass, which is the area you stand on; the mast made up of three sections, which is where the main sail is used; the rudder and dagger board made of aluminium, which is what you use to steer the boat and what keeps the boat to sail in a straight line; and the spinnaker pole made from carbon fibre with an aluminium cap to prevent breaking in the event of a crash, which retracts in and out of the boat when you hoist up the spinnaker. The bottom 2 sections are also made from aluminium whereas the top section is made from carbon fibre.



My studies in engineering at Waterfront UTC have helped me decide what type of sails to purchase for my boat which is an important and determine factor in whether I win or lose a race. The main sail I purchased for my boat is made from transparent Mylar laminate with orange or red Dacron trimming, with a sail area of 9.10 square meters and this is what the helm, meaning the driver, would be responsible for. The smaller sail positioned at the front of the boat, known as the jib is also made of the same material and style with a sail area of 4.09 square meters and this sail is used by the crew, which is my role when sailing. The crew are also responsible for the spinnaker sail, which is also known as the kite and this is made from ripstop Nylon and also available in any colour imaginable. The area of the spinnaker is 16.83 square meters however, it can only be used when you are sailing downwind, which is when the wind is behind you. The three corners of the sail have different names which are the head, the clew and the tack. The clew is the bottom corner of the sail closest to the boat which is what the spinnaker sheets are attached to enabling control. The tack is the corner attached to the spinnaker pole as mentioned earlier and the head is the top corner of the sail. This boat is the most expensive boat I own.

On a positive note, we sailed it for the first time last weekend and it didn't sink so we must have done a good job!

My newest and second favourite boat is called a B14, which is also a double handed boat. This is the fastest double handed boat which I purchased with the person I sail with. It is also the oldest boat as it was constructed in 1987 which is older than my helm and myself combined. This boat differs in certain areas for instance the mast only has two sections, the bottom made of aluminium and the top made from glass fibre to reduce weight and to offer outstanding flexibility in strong winds, thus providing perfect gust response.



The rudder and dagger board are made out of fibreglass which we had to restore with gel coat because they were old and very worn. The spinnaker pole is made out of carbon composite allowing it to bend under extreme tensions and not just snap, along with the end cap to prevent breaking.

My sails are made of the same materials as my 29er however they have a different style and different sail area. Both the main and the jib sails come in grey and white and the sail area of my main sail is 11 square meters, while my jib sail area is 6.2 square meters. The spinnaker however, despite being the same materials and available in all colours, it has a whopping sail area of 29.2 square meters, equivalent to 314 square feet. These boats generally sell around £16,000 and I picked up this boat for £250 simple due to its age and instead spent a lot of time working on it and re-roping it. On a positive note, we sailed it for the first time last weekend and it didn't sink so we must have done a good job!

My third boat was actually given to me for free and it's the fastest double hander boat in the world. It was also used in the Olympics! This one is called the 49er, and if you haven't already guessed, this was made by the same designer as the 29er. The 49er is a trapeze boat which means the helm and the crew can hang off the side of the boat attached by a wire in order to counter act the boats sails. Whereas on the 29er, only the crew can trapeze on the

boat. The 49er consists of similar materials used for the parts of the 29er. The hull, the mast and the spinnaker pole are made of the same materials although the rudder and dagger on the 49er are made from fibreglass rather than aluminium. The main and jib sails are both made from Mylar film and the spinnaker is made from ripstop Nylon. The spinnaker sail area is 37.16 square meters, the jib covers 7 square meters and the main sail covers 12.97 square meters.

I sail on the river Medway and compete in races all over the UK. Every Saturday at my club in the summer I compete in a race called summer series, which is scored on a point-based system depending on your ranking in the race, and the lower points you score the better. For example if you were to come first you would receive one point but if you came last where there were 30 competitors you would receive 30 points. If you receive a DNF, known as a did not finish, or you fail to turn up, you automatically receive last place. In races where there are a variety of boat models, you will then get introduced to a PY, otherwise known as Portsmouth Yardstick, which is a number that the Royal Yachting Association (RYA) supplies for a boat depending when that boat was made, for example the B14's PY is 870. The lower this number is the faster the boat. I placed 1st in this particular race and after the season had finished I returned for the new years race which also includes the PY system, where I placed 6th.

In March, for the first time, I participated in the Buzz Nationals in Warsash in Southampton. This race consists of a 6 race series spread over 2 days, where I managed to place 1st on all 3 races on day 1, to then secure 1st place again in all 3 races the following day, which ultimately put me 1st for the entire series!

In the winter I participated in a training event in Hayling Island with my 29er for a 2 day event followed by a friendly race with no prize on day 2.

Coming up in 2023 I have one of the biggest races I have ever competed in, called the Round the Island race which is a 40 hour race around the Isle of Sheppey. This race only allows boats with a PY under 900. On July 12th I will be towing my boat to lake Garda in Italy to participate in the B14 worlds and will last for 10 days until 22nd of July. It's an exciting year ahead for me in sailing and I have the help of a sponsor, Allen sailing hardware, for my race in Italy. Wish me luck!

**1st for the
entire series!**

CRAFTS COUNCIL, YINKA CHALLENGE!

Our year 9 students at Waterfront UTC are taking part in The Craft School challenge competition, which is set nationwide to get primary and secondary school students to submit a craft project which focuses on one of the three following themes; play, story telling or empowerment.

The competition is called the Yinka's challenge, and gets its name from the Crafts Council trustee and multidisciplinary artist Yinka Ilori. It is set to encourage craft thinking and creating, to provide a celebratory moment for creativity of a younger generation.

Digital resources and video content are supplied to staff and students to assist with the challenge which will run from September 2022 to March 2023.

The challenge will also be included in a prize-winning event at the Crafts Council Gallery, London in springtime of 2023 and the winners will be selected by an expert panel including experts from NSEAD, AccessArt and Cox London who supports Learning and Business Skills.



We're going to SPACE!

Waterfront UTC enrolled into a virtual RAL Space Early Careers Conference for our year 9 students to attend on 30th November.

The conference introduced space sector professionals to share their experiences with those students who are interested in space careers.

There were featured talks and panel discussions delivered throughout the webinar as well as a Q&A opportunity. Students were able to hear what people in the space industry do in their day-to-day jobs, what skills they use and also their journey from school to the current job role.



grid For Good



In our first term we were delighted to have National Grid deliver a program called Grid for Good to our year 13 students. This program gave students insight into job roles within National Grid and to understand the 'Net Zero Workforce' opportunities. The program introduced students to the recruitment process and then set them group problem solving challenges of real scenarios from Grid's Assessment Centre.

This delivered transferable skills, STAR method answers and next steps for additional opportunities at Grid.

At a later date, National Grid then delivered a virtual career coaching session for a selection of year 13 students and two business taster days targeted for 2/3 engineering students per session. This supplied the students with information on the application process, advanced apprentice requirements, higher apprentice requirements, top tips and do's and don'ts.

nationalgrid

BAE Systems visit

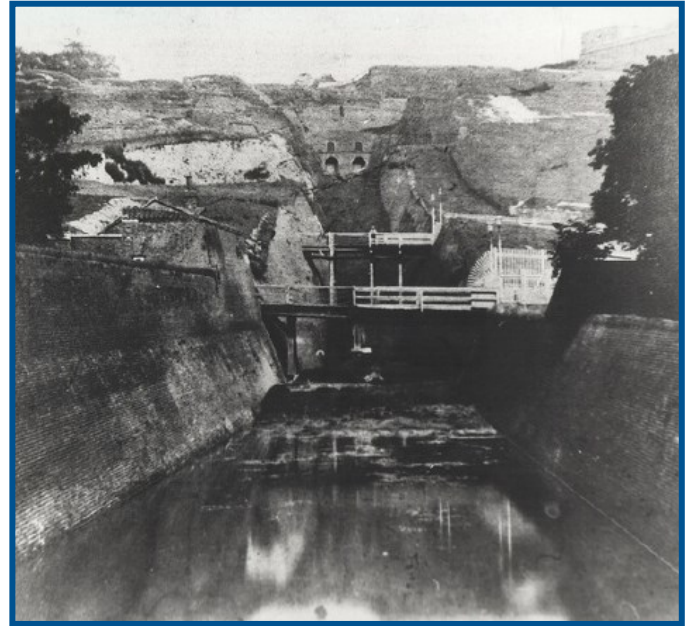
BAE Systems granted Waterfront UTC with a presentation for our year 13 Engineering students regarding apprenticeships they offer and supplied information on what students would need in order to apply and how to do so.

Within this presentation they were eager to see who were interested in the job roles which BAE Systems have to offer and throughout the duration of their visit they were able to select two individuals who blew them away with their engagement. BAE Systems then invited them to their Rochester site for a personal tour and to experience their Simulator, which is an experience that isn't granted often and is only booked out for VIP's.

BAE SYSTEMS

Command of the Heights

The Command of the Heights project is part of the overall regeneration of Medway to reconnect the people of Medway with their local history and reveal Fort Amherst as the important heritage site that it is. The project has transformed areas of historic value including the demolition of Riverside One which sat in the historic Barrier Ditch at the waterfront.



This has restored the relationship to the river and the dockyard that the fort was built to protect.

The barrier ditch divided the military and civilian areas of Chatham and was a critical part of the linked defences. After the demolition of 20th century buildings, the ditch and its original purpose has become visible and more understood.

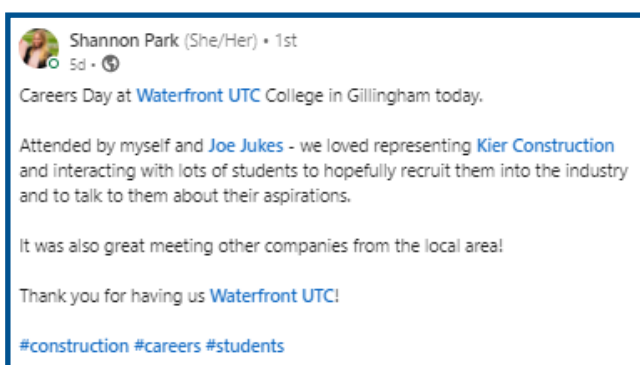
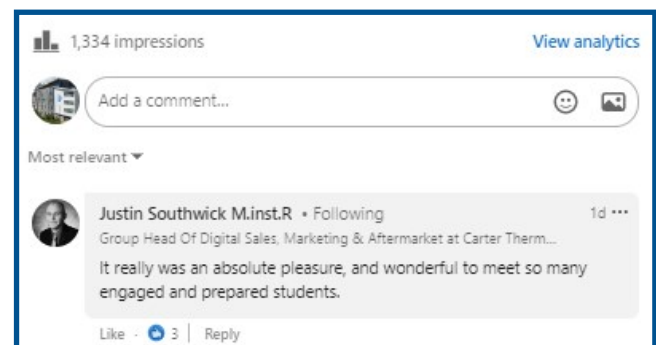
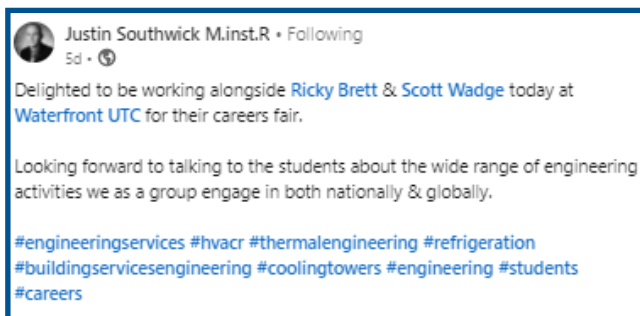
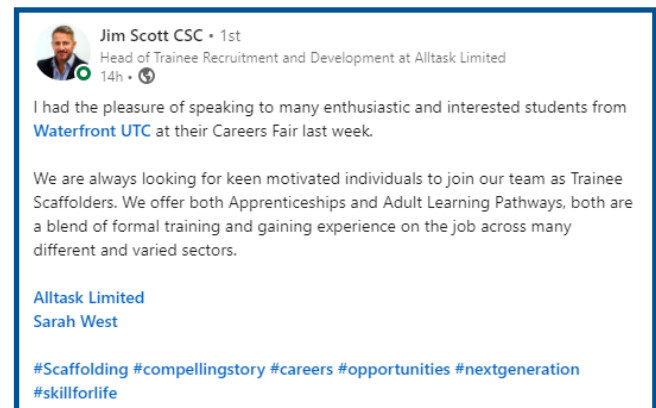
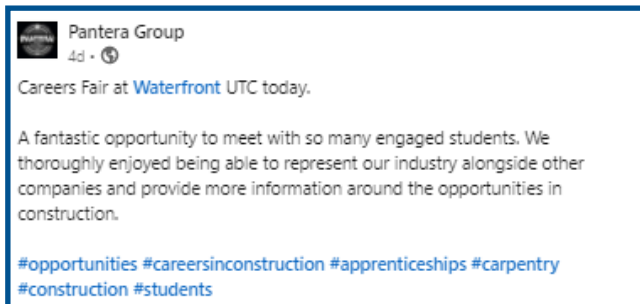
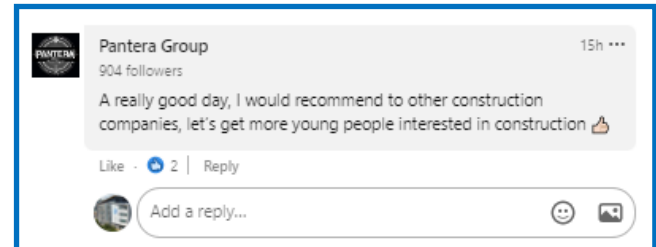
This term our year 9's have been working on the Command of the Heights, and were given the opportunity to see the old drawbridge and the barrier ditch on a visit to Fort Amherst. While there, students were given the task of measuring the height, length and width of the old drawbridge while also using compasses to determine its positioning. These findings are to then be used to create a small-scaled functional model of the drawbridge in teams.

Students will also be learning about the family crests and will be creating a family crest of their own in design.

These trips wouldn't have been possible without the help from the friends of Fort Amherst and English Heritage Trust.

Get involved!

Follow our social media platforms for information and updates!



We have received great feedback on LinkedIn regarding our Careers event.

You can follow our LinkedIn ,Twitter and Facebook. **Get involved!**

