



Engineering Taster Day - 15/11/2021



At the beginning of the academic year, North Lindsey College contacted the school to say that they could offer engineering taster sessions for interested pupils. This sounded like a great opportunity so we requested further details and it turned out that they could offer us free transport to the CATCH Academy in Stallingborough, where their engineering apprentices study, to have a whole day on the site experiencing what being an engineering apprentice is like at their facility.

The 30 pupils we took had all expressed a desire to find out more about engineering. They were divided into 3 groups and they had 3 sessions during the day which they did on a carousel system. One activity was a tour of the plant which required being kitted out in full PPE: overalls, safety boots, hard hats, hi-viz jackets and safety glasses. They went into the Operations Centre and discovered that operating any of the plant requires a lot of paperwork and you must have the correct permissions before carrying out any tasks. They saw the control room with both paper and electronic diagrams of the plant and were shown what information you need and how you can find it and they went outside to the plant containing tanks and valves to see how it operates. They also saw a distillation tank and lots of the equipment that is used in its operation.

The other activities were tasks that were completed within the building. There was a pneumatics exercise where the pupils had to connect up pipes and run air through them to create a hydraulic system. However, some of the apparatus had been rigged to go wrong on purpose to show what can happen and how to deal with the situation. The other exercise was an electrical wiring task which required concentration and good manual skills.



Here is what the students had to say about the day:

- I thought that the electrics was the best because I originally wanted to be and electrician but in was having doubts but now I feel strongly about a career in the electronic field – C Gardner
- The good part about today was the electrical taster but my least favourite part was the tour and I'm more interested in the electrical part – T-L Brown
- I really enjoyed going to Stallingborough and I really liked the pneumatics and the electrical activities because I learnt a lot about the different trades. I didn't really like the tour because I found it quite boring. – J Keating
- I have enjoyed today. The thing I enjoyed most was the electrical taster, because I have learnt how to wire electricals. I also enjoyed the tour as well as it showed us where pretty much everything is. Thank you for organising this trip Miss, Kind Regards, C Bland
- Pneumatics was my fav part, as I thought it was interesting on how it worked, and it was fun. even though I couldn't stop laughing, my least fav part was the electrics it was fun, but it stressed me out as I couldn't really do it – E Dukes
- Thanks for letting us on the trip. It was quite good. I liked doing the engineering stuff and it was good. – T Battrawden
- The parts that I liked was the pneumatics and the electrical because you got to see what's it's like to do them types of jobs but in a smaller version. The air pushed it when we connected the hoses to the items to the air pressure. The electrical because you got to cut the wire and connect the earth, live and neutral and then power it. – G Fall
- I thought the best bit was the electrical taster because it was more hands on than the rest and I was able to see what was behind a plug socket and how to re-wire the plug, however the pneumatics was fun but not as fun as the electrical lesson. – T McGiff
- Rating: 1: Electrics 2: Pneumatics 3: Tour - The electronics was good as I've done it before and that helped me do it quicker and do more advanced stuff. The Pneumatics was good however it isn't my cup of tea, but it was fun and at least I had a go to see if I liked it. The tour was informational however the PPE was a pain to put on and was hot to walk around in. – L Wordsworth
- I really enjoyed going on the trip today and my favourite part of the whole thing was the pneumatic engineering and the electrician job. I wasn't that interested in the plant part of the trip as I found it boring and complicated. – M Jacobs
- I was most interested in the pneumatics due to us getting to build something interesting. The part I didn't like was the electrical because I found it boring. I leant that there are 3 tank containers which would usually hold dangerous chemicals – L Essom
- I enjoyed it all but I mostly enjoyed the electrical part – J Chambers
- I enjoyed the pneumatics because it used strength, had to use your brain and it was very technical. My least favourite was the electronic because I didn't quite understand what to do but I got there

in the end. I learnt how hydraulics work. I learnt the different cables such as the earth, life, and neutral cables. – C Shaw

- I have enjoyed the trip, especially the hydraulics, but the worst part was the electrical as it was too fiddly – R Timmins
- I really enjoyed the trip today so thanks for organising it. I enjoyed the electrical part as it was actually useful and I really enjoyed the day -thanks 👍 – K Morgan
- I did want to be a car engineer. I liked the air activity – C Gray
- Today I learned about mechanical engineering with the pneumatics, electrical engineering with wiring a plug and process engineering with the tour this will help my career because I know more than I did my favourite was mechanical engineering because I like copying off the paper – J O'Rourke
- Completely marvellous, I have always been interested in engineering however going today made me more sure this is the right choice for me. My favourite part was the pneumatics taster session we did. it was simple to get my head round the drawing and was so satisfying when we got the piston to work. the electrical taster was good however all of them failed; despite being right as there was no existing current – J East
- I liked the electrical taster the most because I'm interested about doing engineering when I'm older and liked the plug job the best and being able to see what engineering all is about and see if it's a career I would like to do when I'm older. It interests me and it's a useful life skill to be able to fix light bulbs. The electricity part was my favourite parts of the day and all the activities we did – L Smith-Brooks
- I thought the best thing was the electrical taster because it was interesting and allowed me to see the background behind everyday things. It also boosted my confidence by allowing me to work alone and figure out for myself what to do. Another thing I thought was good was the tour of the area because it gave me an insight into engineering and helped me to understand a bit more about engineering. I never wanted to do engineering but I went to learn about engineering and I came out knowing a lot more than I did when I first went into CATCH and I appreciate how much I learned on my trip. Thank you!! – R Batrawdén
- I really enjoyed the day at North Lindsey as I didn't know what to do when I left school. Due to this trip, I have seen what an engineer does and learnt a lot such as the different types of engineers (i.e. electrical, mechanical) and the wages a good engineer has. My favourite part was the pneumatic lesson as it was enjoyable to experiment with pistons and compressed air. – M Button
- Today was rather... odd. When we arrived, we were taken to the PPE area and given some things to put on (gloves, hardhat, goggles, etc.), and then given a tour of the place. I personally found it quite boring, and it made me feel a bit odd (I don't know why). Then we were assigned the pneumatics task with compressed air; it was okay and a bit fun. After lunch, we were given the electrics task where we had to wire a 2-socket plug and isolator switch. I did quite well with only minor mistakes that were quickly resolved. Then we stripped them down and went back to the room we arrived in until we went back on the bus. The courses of the place aren't exactly what I want unfortunately. I will need to look elsewhere like Lincoln for a course (in fact I applied for an Automotive Engineering course at Lincoln College). However, that doesn't mean the day wasn't completely unenjoyable. I found the pneumatics task enjoyable getting to connect all the tubes and devices, and I did very well at the electronics task. The tour though, as I said before, was a bit boring. Overall, a very nice trip, but not exactly where I want to be. - J Toyne
- Today was enjoyable as I was quite good at most things but got bored on the tour as I was being followed by a camera which was distracting me but overall it was good. – B Beevers

- tour of the plant - the things I found very interesting were all the tanks, equipment, and facilities. the operating room and the P&ID were very technological (and very complex).

pneumatics - this was very fun and educational (building the circuits), it could also be challenging at times (which is part of the fun), it could sometimes go wrong (or be a bad circuit) which is mainly the good part.

electrical engineering - this was the best part of the day as we did a practical that involved three copper wires (earth, live and neutral) and we learned how to put them into a socket, so that we could conduct electricity. – R Smith

- I enjoyed the practical part of the trip so the pneumatics and the electrical wiring which were more hands on rather than the tour around the grounds of the school – B Wandera
- I found the trip highly enjoyable. Thank you for organising this for us all. I liked taking part in the electrical activity as well as the pneumatic task. This has helped me to try and discover what I would like to do in the future. Thank you again for the wonderful trip - Keira Robbins
- The north Lindsey college was good, and I want to do car engineering. I disliked the plant engineering because it was too hot and too much leaning. – G Martin

Thank you very much to CATCH for hosting us, thank you to North Lindsey College for inviting us and thank you especially to Emma for organising everything.