

## Anglo Virtual Career Events

### Alberto Oliveira, Mechanical Engineer Transcript

Hey Anglo students, how are you?

My name is Alberto and I am a Brazilian Mechanical Engineer working in the UK for 4 years now. Today, I will be speaking why I think following a STEM career is such a great thing!

The first thing I will be speaking about today is what is my career and what professions exist within my organization. As I mentioned before, I am a Mechanical Engineer working in the Automotive industry in the UK and I currently work in a Global OEM performing tests in an engine test facility.

Testing in an engine test facility means that we, as engineers, need to ensure that the vehicle or engine will be compliant with the regulations and with the legislation in place. So, let's say, for instance, that during our design process, we've noticed that the oxides of nitrogen emission were higher than stipulated by the legislation. So, (to solve this problem) we need to use all the data that we've collected from such tests, we need to analyse all the data and then, we need to come up with a solution that will bring those numbers down and that will make the vehicles legal so they can be sold to the customers. It's a quite challenging job that requires the assistance of mechanical and electrical engineers, researchers, scientists, IT people, health and safety advisors, so we can ensure that these vehicles are developed and designed up to the latest standards of technology.

The second thing I want to speak about is what I think it's great about my career. I think it's great that we develop products that are technological, innovative and that are going to be released in only 3 to 4 years to the public.

Another thing I think it's great about my career is that it's quite challenging and I do feel sometimes that I am like Tony Stark building my own suit in cave. Well, I don't look like him nor have the same powers as he has, but it was the closest I could get of becoming the Iron Man.

The third aspect to speak about is: what are the personal qualities that you need to further develop and what qualifications do you need to work as a Mechanical Engineer. Being a Mechanical Engineer requires you to have a passion for understanding how mechanical devices and processes work. It's also important to highlight that we usually work in teams trying to solve a specific problem, so further developing your problem-solving skills and team-working are quite beneficial. If you want to work globally or outside your country, learning a second, third, fourth, ... as many languages as you want will be quite good and, be open-minded to new cultures. Finally, if you want to qualify to work as a professional Mechanical Engineer you need to have a passion for Maths, Physics and a bit of Chemistry and you'll need to attend courses at the university such as the Bachelor of Science/Engineering in Mechanical Engineering. Having a Master's Degree in such field is also advisable if you want to further progress in your career.

The fourth and last point I want to cover is what piece of advice would I give to you who's about to choose your career. I think the answer to this question is to be open-minded to career paths you have available to you, to follow your heart and do what you love. I don't regret any bit in choosing a STEM career to follow because I love Physics and Maths and I love understanding how things function. Also, I can use everything I've learnt at the university in my Mechanical Engineering course to perform at work and even to play and to build guitars like this. For instance, I can understand what the wood type is, what the material used for the frets is, how to setup my guitar, etc. My advice is then to be open-minded, to follow your heart and to try and narrow down what you love.

Thank you very much for your attention and I look forward to seeing you in the Q&A session on the 26<sup>th</sup> November.

See you then! Bye!

Alberto Oliveira, MSc AMIMechE

Mechanical Engineer